THE COASTAL DEFENSE INITIATIVE OF 1989

HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

AND THE

SUBCOMMITTEE ON OCEANOGRAPHY AND THE GREAT LAKES

OF THE

COMMITTEE ON MERCHANT MARINE AND FISHERIES HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

H.R. 2647

THE COASTAL DEFENSE INITIATIVE—LEGISLATION INTENDED TO FIGHT AND WIN THE WAR AGAINST COASTAL POLLUTION

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H.R. 2647, "THE COASTAL DEFENSE INITIATIVE OF 1989"

TUESDAY, JUNE 27, 1989

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, SUBCOMMITTEE ON OCEANOGRAPHY AND THE GREAT LAKES, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Washington, DC.

The Subcommittees met, pursuant to notice, at 10:10 a.m., in Room 1334, Longworth House Office Building, the Hon. Gerry E. Studds (Chairman of the Subcommittee on Fisheries and Wildlife Conservation and the Environment) presiding.

Members present: Representatives Studds, Hughes, Carper, Bosco, Manton, Tallon, Hochbrueckner, Pallone, Unsoeld, Young, Shumway, Schneider, Saxton, Miller, Coble, Herger, and Goss.

Staff present: Subcommittee on Fisheries and Wildlife Conservation and the Environment: Bill Woodward, Jeff Pike, Will Stelle, Joyce Sacco, Lisa Murray, and Rod Moore. Subcommittee on Oceanography and the Great Lakes: Ray O'Malley, and Bill Ashworth. Full Committee: Sue Waldron, Joan Bondareff, Dan Ashe, Judy Wells, Tom Melius, and Lisa Pittman.

OPENING STATEMENT OF HON. GERRY E. STUDDS, A U.S. REPRESENTATIVE FROM MASSACHUSETTS, AND CHAIRMAN, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

Mr. STUDDS. The Subcommittees meet this morning to begin consideration of legislation that I have introduced, along with a number of other Committee Members, to fight and to win the war against coastal pollution.

Our goal is to restore to our citizens the right to clean beaches, clean water, and a coastal environment that produces fish and shellfish that are safe and healthy to eat.

We all remember the horror stories of last year, but last month, 287 tons of garbage were hauled from New York harbor, and last week, 25 beaches on Long Island were closed because of pollution from sewage. Balls of grease washed up along 10 miles of the Jersey shore and major oil spills, as everyone knows, threatened Rhode Island, Delaware, and Texas.

Next week is the 4th of July, a time we should be worrying about weather reports, not bacteria counts; crowds, not pollution; sunburn, not gastroenteritis.

For two centuries, Americans have been drawn in summer to the sea, but unless we stop poisoning our coasts, the beauty that attracts millions every year to the beaches and boardwalks of America will surely and steadily fade.

The oceans are nature's greatest gift to us but they are not inexhaustible. If we treat them as a dump, they will, in time, become a dump. If we continue polluting the estuaries that are the nursery grounds of marine life, we endanger not just the future quality of life—we endanger the survival of that life itself.

The Coastal Defense Initiative would safeguard our coasts by establishing and enforcing strict standards for ensuring the quality of near-shore waters.

It would replace the private right to pollute with a public right to be protected from pollution, and it would generate more than $100 million each year to assist the efforts of State and local governments.

CDI was developed in close but informal cooperation with Federal and State agencies, some of whom will testify today.

Because the bill was introduced such a short time ago, today's hearing will serve not to conclude discussion but to begin it, to explore the concepts that underlie the CDI and to discuss alternatives, to compare State perspectives with that of Federal officials, and perhaps, above all, to give this Administration a chance to demonstrate that it—unlike its predecessor—has the political will to fight coastal pollution and the seriousness of purpose to defeat it.

Mr. STUDDS. Are there additional opening statements? The gentleman from Alaska.

OPENING STATEMENT OF HON. DON YOUNG, A U.S. REPRESENTATIVE FROM ALASKA

Mr. YOUNG. Mr. Chairman, I appreciate your comments and statements. I wish you would leave the Administration out, the last Administration, because coastal pollution is something that has been going on for many, many years, regardless of the Administrations.

It is a problem that this Nation must face. We have now estimates that 85 percent of the Nation's population will be within 2 miles of our coastal areas around the Nation.

I also, Mr. Chairman, want the general public to understand who will pay for this. We can put in penalties. We can tell the polluters that they cannot pollute. In the long run, it is going to take money and is going to take support of the general public.

I would like to suggest, respectfully, that as we pass these laws—and I have mentioned to you before, that as we pass laws, we must not isolate ourselves into one Nation itself. The ocean belongs to all, other countries, and they also must be policed. We also must understand since we require a penalty upon those companies that might be polluting, and production of a product that consumers of America might be consuming, that in doing so, we do not make that product out of line, so that we are importing again and thus imbalancing our trade deficit.

I think it is crucially important, as each committee—I serve as the Ranking Member on the Interior Committee, and I say this Committee is not quite as guilty—that we pass laws that are global laws. Now they are not isolated laws.

We hear much about the unfairness of trade. We hear much about how we are being beat by the Japanese and the Germans, and the other day I saw a country I never heard of. I had to go back home and look at my encyclopedia. They were producing, I think it was—I cannot even pronounce it now—producing clothes that we are now wearing. Probably somebody in the audience has them on.

There are reasons for that. Because we have a tendency to pass laws that have great merit here, but make us less competitive, I say, on the world market.

So, Mr. Chairman, although I strongly support this legislation, because I think what is happening here—and I have just gone through a terrible period of time in Alaska, and you talk about Texas and Rhode Island and Delaware, and their little oil spills—you know, everything is according to size.

I am going to suggest that I wish I heard the same outcry about the syringes—I mean, a terrible outcry about the garbage that is being dumped into our ocean from all of our major cities, not just on the barges that we see but through the storm drains that go into our ocean. More oil today is delivered to the ocean via that than from the Alaskan oil spill.

And so I do think it is time that the general public recognize that this is their responsibility. We can continue the hearings, we can talk, and as I am doing right now—I have a great deal of rhetoric, some of it may make sense, some of it may not make sense—but the truth of the fact is, the public has to say, "Yes, we're willing to sacrifice and we're willing to pay," because there is no more money here from us.

They have to support the way to make the money and they also have to understand, if we come back with legislation and say we are not going to import those products produced abroad, because we passed a law here that makes our companies noncompetitive—we are not going to buy those products, and the public is the best curtailer of that activity.

So, Mr. Chairman, I look forward to the witnesses today, and unfortunately I am not going to be able to stay for this whole hearing, but I will stay for part of it. Thank you.

Mr. STUDDS. We hope you will come back from time to time. Thank you.

Mr. YOUNG. Thank you.

Mr. STUDDS. Before we go on with additional opening statements, particularly members of the press, or somebody who needs to write, the first half of this lower dais is available to you.

Are there additional opening statements from Members? The gentlelady from the smaller oil spill.

OPENING STATEMENT OF HON. CLAUDINE SCHNEIDER, A U.S. REPRESENTATIVE FROM RHODE ISLAND

Miss SCHNEIDER. But grand in importance; big in importance.

Mr. Chairman, I appreciate you calling the hearing on this proposed legislation, the Coastal Defense Initiative, and I think it is precisely that—we have to be more defensive in our approach toward dealing with the coast.

I will say that in the 100th Congress we have a number of successes upon which we can build, and I think that they are substantial successes. The fact that we have reauthorized the Clean Water Act is one step in the right direction.

The Ocean Dumping Act which finally, now, requires that no more ocean dumping take place after 1991 is also significant. The Plastics Pollution Act also passed last year, the banning of the disposal of plastics in our waters, not to mention the Anti-Fouling Paint Control Act, and finally, the reauthorization of both the Endangered Species and the Marine Mammal Protection Acts are all, I believe, an excellent record upon which we need to build.

Now, granted, we have significant polluters to deal with and we can pass all the laws that we wish, but unless there is adherence to those laws, we will still not be effective in accomplishing our ultimate goal.

What is interesting to me is that so much of the discussion is always focusing on money, and how are we going to clean it all up. Well, I think that we have forgotten the old adage that "an ounce of prevention is worth a pound of cure", and, clearly, we have the opportunity to prevent much of the pollution and degradation that is taking place in our coastal waters.

It is lamentable to me that we have not focused more attention on some of the principles that were initially included in the Coastal Zone Management Act, which looked very closely at where and how, and under what circumstances development would be taking place.

We have, right now, 69,000 individually-permitted industrial and municipal dischargers in the United States, and 30 percent of these major dischargers are located near coastal waters.

In addition to that, industrial facilities are discharging billions of gallons of effluent daily into our sewers and municipal treatment works. So, needless to say, the ideal would be for us to be in a position where we could enforce some of the pre-treatment standards for industrial dischargers, but also to recognize that we, as a people, have to make some determinations as to what our future environment will look like.

Right now 75 percent of the United States' population lives within 50 miles of the coast. Now this is a 70 percent increase since 1950, and if we are going to add these population pressures to the fragile coastal environment, then it is clear that we must take a more comprehensive view of what kind of style we are going to live in, not to mention what kind of legislation we are going to pass, in order to focus on a more preventative mode of coastal degradation as opposed to one that is focused on spending more money on cleaning up problems that we will continue to generate.

So, Mr. Chairman, I commend you for pulling together this hearing. I look forward to the comments by the excellent panel of witnesses that you have gathered here this morning, and I thank you for the opportunity to give you a statement.

Mr. STUDDS. Are there additional opening statements?

[No response.]

Mr. STUDDS. If not, we will—the gentleman from New Jersey.

OPENING STATEMENT OF HON. JAMES SAXTON, A U.S. REPRESENTATIVE FROM NEW JERSEY

Mr. SAXTON. Thank you, Mr. Chairman, and I obviously want to commend you for holding this hearing this morning. I think it is one that is of great interest and very important.

Mr. Chairman, the condition of our coastal waters is a topic of great concern to me and likewise to the Members of the Subcommittees.

Our living marine resources, I think we all know, are oftentimes too often in jeopardy. Our coastal economies are being severely impacted. Clearly, now is the time for more rigorous prevention and clean-up programs.

Our coasts are being assaulted. Spilled oil is washing ashore along the east and west coasts killing wildlife. Over the weekend, we had three additional oil spills which of course are of great concern to us, perhaps a topic related to this rather closely.

Untreated sewage is spewing into the coastal waters during heavy rainstorms, severely affecting coastal water quality.

I would like to quote directly from the June 11th, 1989 New York Times article entitled—the headline read, "Sewage Runoff in Long Island Sound Closes Westchester Beaches."

And the article went on to say: "All county beaches will remain closed through the weekend as a precaution to prevent people from accidentally ingesting the contaminated water."

Mr. Chairman, I am excited about this bill. I think it is a good one. I would note that this bill addresses an area of particular interest to me—that is, section 403 of the Clean Water Act.

As you know, I have introduced Bill H.R. 403 which also amends this section. I hope, Mr. Chairman, that at the appropriate time you will consider an amendment in the nature of my bill. This will extend section 403 ocean-discharge criteria to all estuarine harbor areas and not limiting these criteria to only designated estuarine areas under section 320 of the Clean Water Act, and outstanding resource waters under section 402 of the Coastal Defense Initiative.

Mr. Chairman, I look forward to working closely with the Members of the Subcommittee, and particularly with you, and I look forward to hearing what the witnesses have to say here today.

I ask unanimous consent that my entire statement be placed in the record.

PREPARED STATEMENT OF HON. H. JAMES SAXTON, A U.S. REPRESENTATIVE FROM NEW JERSEY

Thank you, Mr. Chairman for holding this hearing on H.R. 2647—The Coastal Defense Initiative of 1989.

The condition of our coastal waters is a topic of great concern to me and likewise to all Members of these Subcommittees. Our living marine resources are in jeopardy. Our coastal economies are being severely impacted. Clearly, NOW is the time for more rigorous prevention and clean-up programs.

Our coasts are being assaulted. Spilled oil is washing ashore along east and west coasts killing wildlife. Untreated sewage is spewing into coastal waters during heavy rainstorms severely effecting coastal water quality. I'd like to quote directly from a June 11, 1989 New York Times article entitled "Sewage Runoff in L.I. Sound Closes Westchester Beaches."

"All county beaches will remain closed through the weekend as a precaution to prevent people from accidentally ingesting the contaminated water."

The summers of 1987 and 1988 were economically devastating to New York and New Jersey coastal businesses. Pollution and beach wash-ups impacted beach use, travel and tourism industries, and marine recreational fishing industries. New Jersey's loss in revenue for 1988 is estimated at $1.6 to 2 billion dollars. In 1988 the Long Island Tourist industry and economy lost over $1.3 billion dollars as a result of beach wash-ups.

As an aside, I might mention that in my own New Jersey district, much of the summer tourist activity is centered on Long Beach Island. While 1987 was marked by beach wash-ups and closings in this summer resort community, the beaches were virtually spared the indignity of pollution in 1988.

Still, the tourist industry suffered—it suffered because the public was troubled by the very perception that the beaches were dirty. It was troubled by reports of pollution elsewhere along the coast. In short, the ugly beach incidents of the summer of 1987 generated a ripple effect of public alarm which, to this day, continues to carry over.

The summer of 1987 was also the time of some unusual marine events. Hundreds of Atlantic bottlenose dolphins washed ashore along the east coast. An unprecedented toxic red tide severely impacted coastal economies along the southern Atlantic. North Carolina was especially impacted—causing losses of $260,000 in the fishing and tourism industries in the first week.

Presently, the situation is grave—four oil spills are in the process of clean-up. Dead marine mammals are washing ashore with similar shocking symptoms as the previous mass mortality of dolphins from 1987/88. New York beaches are being closed because of contaminated water.

What should we do or maybe a better question is what can we do to stop this coastal assault? We can make new laws and strengthen existing laws which clean-up and prevent further fouling of our coastal waters.

Mr. Chairman, I am excited about this bill. I think it is a good one. I would note that this bill addresses an area of particular interest to me—Section 403 of the Clean Water Act. As you may know, I have introduced a bill (H.R. 403) which also amends this Section. I hope the Chairman will consider an amendment in the future in the nature of my bill. This will extend Section 403 ocean discharge criteria to all estuarine and harbor areas, and not limiting these criteria to only designated estuaries under section 320 of the Clean Water Act and outstanding resource waters under Section 204 of the Coastal Defense Initiative. Understandably, limited resources may call for prioritizing coastal areas such as exists presently under Superfund.

I look forward to working closely with both Subcommittees and the witnesses here today as we try to defend our coastal waters from any further degradation and try to improve water quality.

Mr. STUDDS. Without objection. Also without objection, statements of Mr. Davis and Mr. Hertel.

[The statements of Mr. Davis and Mr. Hertel follow.]

STATEMENT OF HON. ROBERT W. DAVIS, A U.S. REPRESENTATIVE FROM MICHIGAN

Mr. Chairman, I am pleased to see that your bill does not ignore our fourth coast, the Great Lakes. Fortunately, the Lakes have been the focus of a fairly successful regional effort to improve and maintain our water quality. In fact, in many cases the region has presaged your bill in developing innovative approaches for combating coastal pollution problems.

Concern about Great Lakes water quality have been voiced since the mid-1800s, when deteriorating fisheries drew recommendations for improvement. When the International Joint Commission (IJC) was created in 1912, its first task was to examine and confirm the extent of Great Lakes water pollution.

The Federal Government has demonstrated its concern about the region by establishing a Great Lakes National Program Office run by the Environmental Protection Agency (EPA) to develop a plan and to coordinate Lake pollution control efforts. It has been assisted in this task by one of the EPA Large Lakes Laboratories as well as the National Oceanic and Atmospheric Administration (NOAA) Great Lakes Environmental Research Laboratory (GLERL). Our Committee has recently added to this Federal arsenal a Great Lakes Research Office to be co-located with GLERL. I have also been active in seeking funding to expand the existing coastal pollutant inventory maintained by NOAA to the Great Lakes.

The Great Lakes States have been active partners with the Federal Government in this effort, and recently pledged themselves to a $100 million Great Lakes Protection Fund to clean up persistent water pollution problems. Because they are also international waters, commitments have been made by our Canadian neighbors to do their part in purifying the Great Lakes with the signing of the Great Lakes Water Quality Agreement in 1972. This agreement was recently amended to reflect our new focus on toxic contaminants contained in or being added to the Lakes through air, run-off, and direct discharges. In addition, the agreement now reflects a new "Lake-wide" management approach for improving the ecology of the Lakes.

On the land side, four of the Great Lakes States have developed coastal zone management programs. A fifth state, Ohio, is expected to seek Federal approval of its plan soon. These plans can serve as one method of controlling pollution draining into the Lakes, as your bill recognizes, although the current language mandating the development of pollution control plans may discourage the remaining states from participating.

I would hope that other regions learn from the example that the Great Lakes have set, and welcome our witnesses' views on your legislation.

STATEMENT OF HON. DENNIS M. HERTEL, A U.S. REPRESENTATIVE FROM MICHIGAN, AND CHAIRMAN, SUBCOMMITTEE ON OCEANOGRAPHY AND THE GREAT LAKES

Good Morning. Today, the Subcommittee on Oceanography and the Great Lakes, and the Subcommittee on Fisheries and Wildlife will meet to discuss the recent damage our coastlines have suffered from coastal pollution and what steps are deeded to restore them to a pristine state.

During the past 5 years, and most recently during the past 4 months, we continue to hear horror stories of medical waste washing up on our shores, toxic pollutants from industrial plants finding their way to our coasts, and pesticide runoff flowing from farms and city streets into our bays and waterways. Most recently, this growing menace has been compounded by the *Exxon Valdez* tragedy in Alaska, and by the recent spill of 420,000 gallons of heating oil from a tanker at the mouth of the Narragansett Bay in Rhode Island. The effects from this spill are now becoming apparent along the Delaware River and on Brenton Cove, Rhode Island.

H.R. 2647, The Coastal Defense Initiative of 1989, would address the problem of coastal pollution by strengthening marine water quality protection, and by more carefully monitoring coastal regions in need of detailed monitoring efforts. Recent estimates show that by 1990 more than 120 million people will live within 50 miles of the ocean and even more will depend on the coastal zone for their drinking water and food. We must take action now to reverse the declining state of our coastlines.

I look forward to working with my fellow Members, Federal Agencies, and state and local officials in remedying this situation.

Mr. STUDDS. Are there additional opening statements?

[No response.]

Mr. STUDDS. If not, we will proceed to our witnesses. We have four, as Members can see, two from Federal agencies and two who will speak from the perspective of experience at the State level.

What we will do is, we will treat you as a panel, ask each of you to make your presentation in the beginning, and then we will ask you questions together, and I hope we will have some real interchange.

We will begin with Ms. Rebecca Hanmer, Acting Assistant Administration for Water of the EPA. Ms. Hanmer, welcome.

STATEMENTS OF A PANEL, CONSISTING OF REBECCA HANMER, ACTING ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY; KENT BURTON, ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION; ROBERT PERCIASEPE, DEPUTY SECRETARY, MARYLAND DEPARTMENT OF THE ENVIRONMENT; WILLIAM EICHBAUM, ATTORNEY/CONSULTANT, WASHINGTON, D.C.

Ms. HANMER. Good morning. It is a pleasure for me to be back to follow up on the hearings you had last year to explore the coastal problems.

I have with me three of our office directors who are directly responsible for implementing various provisions of the new coastal acts we have gotten, and I would like to let you know who they are.

Tudor Davis is the head of our Marine and Estuarine Program. Jim Elder is the head of our Water Enforcement and Permits Program, and Martha Prothro heads our Water Regulations and Standards Programs.

All three of these offices are engaged in a number of new activities under the Water Quality Act Amendments of 1987, the new Ocean Dumping Ban Act, and the other laws.

As we testified last year, EPA's work in estuaries and near-coastal waters has repeatedly identified significant and pervasive environmental problems, principally from toxic poliutants, and this is both from continuing contributions of point and nonpoint sources, and also from in-place, contaminated sediments.

There are also persistent problems from pathogens, from nutrients, eutrophication, dissolved oxygen problems, and problems of habitat loss and changes in living resources.

We believe that the major causes of this coastal degradation are land-based sources of pollution coupled with the effects of population growth and associated development.

The Coastal Defense Initiative would combat this coastal pollution by targeting Federal and State programs, and providing new tools to address pollution problems, including mechanisms to generate new revenues and strengthen enforcement.

As such this legislation does address what we believe are some very pressing issues. However, EPA has not had time as yet to develop comments on all aspects of your legislative proposal or the other coastal bills that have been introduced, so we are prepared to discuss them in a general way, in terms of the principal issues. We are still working on our analysis of the details.

Primarily what I would like to do is share with you some insights we have learned from our operating experience in the surface water protection programs and the National Estuary Program.

Throughout my written testimony, which I have provided for the record, we have an update on a number of activities. With your permission, I would like to skip the recital of these activities and go just to a brief summary of what we think these mean.

In addition to implementing the new coastal and marine legislation passed by the last Congress, including the Ocean Dumping Ban Act of 1988, the Medical Waste Tracking Act, the Shore Protection Act and the Plastic Pollution Research and Control Act of

1987, the agency has issued an interim national coastal and marine policy.

Administrator Reilly has now reviewed this policy, which was originally issued by former Administrator Lee Thomas, and he has endorsed this policy, strongly.

Our policy establishes goals and objectives to ensure recreational uses are maintained on our beaches and shoreline; strengthened pollution controls and protection of living resources; pollution prevention which we believe is a key to further progress with point-source pollution; and a number of areas with nonpoint-source pollution—land use and growth management, in cooperation with the Coastal Zone Management Program and State and local agencies, and improved coastal science and international efforts.

In order to accomplish the goals of this EPA policy, we are emphasizing building partnerships among Federal agencies, State and local Governments, interest groups, and the public.

An agency standing committee to protect the coast, that is, a Standing Committee on Marine Policy, is now being formed to oversee implementation of our policy, and we will begin working with other Federal agencies to broaden the policy initiatives beyond EPA.

Our new emphasis on coastal protection is currently being implemented primarily through the agency's coastal and marine programs, such as the Chesapeake Bay and Great Lakes Programs, the National Estuary Program, the Regional and State Coastal Water Strategies, and special initiatives, including the new Gulf of Mexico Program, and the Mid-Atlantic Bight Initiative, as well as the ongoing Ocean Dumping Program.

All of these programs emphasize the importance of taking action now, where specific problems are identified, to achieve environmental results.

We are striving to build grassroots support at the State and local levels by working closely with the public, especially through our National Estuary Program. This bottoms-up process of collaborative problem-solving we think is the best way to build the political and public will to support and pay for environmental protection.

In my longer testimony, I have summarized some examples of activities which we think are particularly noteworthy, coming from our National Estuary Program and some of our coastal initiatives.

Rather than repeat these examples, I would like to summarize what I think the examples of our experience show. There are five basic points, which I hope will be helpful in considering legislative initiatives.

One basic point is that we need to continue vigorous implementation and enhancement of our base point-source control system. That is obvious.

The legislative authorities are basically there at the Federal and State level. It is really a question, we think, of using these authorities more effectively, with more urgency, and that is a question of both resources and will.

The second major point we have learned from our experience is that we have to give a great deal of new program emphasis to nonpoint-source controls.

Just continuing to fine-tune our point-source control programs, and to expend the bulk of our money there will not save the coast. We have really got to mobilize a lot of attention to nonpoint-source controls, both in terms of institutionalizing best management practices, and also using market forces.

We must also broaden our concept and use of water-quality standards beyond the traditional chemical-specific controls, to cover new mechanisms for defining and protecting our living resource base.

The Chesapeake Bay Program is the area where we are showing ourselves the way, for example, in developing standards and goals for living resources.

Clearly, also, new program emphasis on combined sewer overflow and storm-water runoff controls in a number of areas are badly needed.

The third major point that we have learned is that effective integration of pollution control and land-use management is urgently needed, and that implementation of State and local land-use authorities need to be strengthened in terms of their emphasis on environmental protection.

The Maryland Critical Areas Program is an excellent example of this recognition; one of the strongest aspects of your legislation is its treatment of the appropriate relationship between land-use management programs and the pollution control programs.

The fourth point is that Federal, State and local agencies need the flexibility to design solutions in a given area that work there. The diversity of solutions should not be hampered by theoretical national notions of what the problems are in given areas, nor should we throw all of our money at any one solution like combined sewer overflow controls or point sources of toxic substances.

Rather, we need to tailor the solutions to the needs of the individual estuaries. This, again, is something we are trying to do in the National Estuary Program, and we need to go beyond pollution controls to look at land-use management, and in some areas fisheries management, as adjuncts to pollution control behavior.

And finally, lack of resources, especially at the State and local level is a serious constraint. As I said, we are using techniques like the National Estuary Program which mobilize local involvement, to also help mobilize local support for the environmental expenditures, since it is inevitably the local public, in one way or another, that will bear the bulk of the cost.

A key element of your legislative effort is funding sources, and rightly so. Cleaning up the near-coastal waters and protecting our coastal resources will not be easy, nor will it be cheap.

The relative roles in funding responsibilities of Federal, State and local Governments as well as private industry should be assessed carefully in designing these funding proposals.

The States, and some municipalities, in particular, are facing major new responsibilities and major resource constraints.

For example, responsibility for funding municipal wastewater treatment systems has shifted away from Federal grant programs to State and local funding.

While this is a necessary, and we think a good national initiative, there are still particular areas that are going to need help.

We are replacing the Federal construction grants with new State Revolving Loan Programs, but looking for additional sources of funding such as your legislation does, is very badly needed.

The change in the Water Quality Act from a Federal Construction Grant Program to loan funding, while it provides the long-term approach to meeting wastewater construction needs, does have an unfortunate byproduct in that a lot of the money that the State water pollution control agencies were depending upon to run their programs is disappearing because it was in the form of construction grant set-asides.

There is about a $21 million shortfall, at this point, between fiscal 1988 and fiscal 1990, and there are also growing needs. So one of the major pieces of work we have been doing in the last year is to focus on the State funding study problem which affects not only maintenance of the base programs, and permitting and enforcement, but any new initiatives that the States need to undertake in nonpoint source, or other kinds of coastal management initiatives.

We have just finished the State funding study, and, among other things, we have quantified the State resource problem, and we have analyzed some possible solutions such as revenues from fees, fines, and penalties, and other sources, at the State level.

As you are aware, your proposals raise a number of the same issues at the Federal level. We do not have all the answers, at the moment, to respond to your proposals, but we would hope to work with you.

There are some major issues that the legislation raises, such as what is the equity of focusing on coastal dischargers over inland dischargers; whether or not the fee systems would be designed as essentially "pay-to-pollute" arrangements, or whether they would be designed so as to encourage reductions in toxicity and amounts discharged.

If the latter is the case, which we think would be environmentally preferable, then these kinds of fee systems may not be a long term or stable funding source, even though they might be an interim funding source.

Also, how do we fairly deal with nonpoint-source pollution, which we have estimated is about 50 percent of the problem in the coastal areas?

We will be glad to work with the Committee further on this and other issues.

I will stop, and indicate to you that we are very pleased with the initiative that the Committee is taking. You are addressing most of the areas that we think need to be addressed. Our plea, is that we focus on those areas in the coastal zone protection programs that are really broke.

Some of the provisions on enhancing enforcement capabilities, for example, might be enhancements of authorities which are basically there in the Water Quality Act, or other statutes.

There are some other areas that we regard from our National Estuary Program experience as being much more seriously broke, and we would hope that the Committee would focus on those. I have indicated in my five summary remarks what I think those are.

Thank you very much for the opportunity to comment, and I am pleased to be here.

[The statement of Ms. Hanmer can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much. Just a point of clarification. When you said we should focus on those sections which are "seriously broke," do you mean those that do not work or those that are out of money?

Ms. HANMER. Both.

Mr. STUDDS. Thank you.

Ms. HANMER. I think part of what is "seriously broke" is funding—especially at the State and local level. All of this is going to cost a lot of money.

Mr. STUDDS. Right. Thank you, Ms. Hanmer. Next, Mr. Kent Burton, Assistant Secretary for Oceans and Atmosphere at NOAA. Mr. Burton.

STATEMENT OF MR. BURTON

Mr. BURTON. Thank you, Mr. Chairman. I am also pleased to be here to describe some of NOAA's activities with respect to assessing long-term trends in coastal pollution and we also are anxious to work with you, as is EPA and the rest of the members of this panel, in working on the proposed legislation, the Coastal Defense Initiative of 1989.

As Ms. Hanmer has described, the Administration has not yet taken a position on the bill. We, however, like EPA, have looked at it and have observations we can make, and are anxious to work with the Committee, to try and arrive at an appropriate legislative response to some of the issues that the Committee is looking at here.

I have a more extended statement for the record, that I would like to include for the record, and I will deliver here in a more abbreviated statement.

With me today are NOAA's Bud Ehler, Director of the Office of Oceanography and Marine Assessment. Also, Don Scavia from the Office of the Chief Scientist. These two organizations are responsible for most of the agency's coastal pollution monitoring and assessment activities, and they are here to respond to any specific questions that may arise.

Since the end of March, the *Exxon Valdez* oil spill, and the three spills that occurred, of course, just over the weekend, have illustrated, dramatically, the immediate effects of pollution on the sensitive coastal areas and their respective resources.

In addition, medical wastes on the East Coast beaches last summer illustrated the immediate effects of pollution incidents on viable coastal environments, marine recreation and tourism, and local and regional economies.

As dramatic as these events have been in the eyes of the American public, however, at least as important is the less visible systematic deterioration of the quality of our coastal environment from chronic discharges of pollution into coastal areas and the loss of important coastal habitats.

Toxic pollutants from point and nonpoint sources, nutrients from waste-water treatment plants, and agricultural sources, as well as the continuing destruction of coastal wetlands due to human activities, pose long-term threats to coastal resources.

Pollutant discharges to coastal areas are significant and they will increase as population and industry continue to concentrate along the coast, and of course that is something that no bill can appropriately legislate—increases in population.

Now there are things that we can do on the margins, but we need to understand and cope with some of these basic dynamics of the economy.

NOAA efforts are directed to the development of sound scientific and technical research in the assessment of coastal pollution and its effects upon the marine environment.

For each of the last 5 years, NOAA's National Status and Trends Program has been monitoring, systematically, estuarine and coastal sites to determine the concentration of toxic pollutants in mussels and oysters, bottom-feeding fish such as flounder, as well as sediments.

I would like to say that this program, the National Status and Trends Program, is the only national program that is using uniform methods to collect and analyze toxic pollutant concentrations in selected coastal fish, shellfish and sediments, to produce a consistent high-quality data base with which to compare these concentrations across sites and to analyze trends over time.

I think it is fair, that this being the only national program of its size, is important, and it produces the sort of data base from which any meaningful legislation and regulation is developed.

We have placed special emphasis on quality assurance and quality control, so that the scientific validity of these comparisons can be objectively judged. We are working with both the National Institutes of Standards and Technology within the Department of Commerce as well as the National Research Council of Canada, on continuing performance evaluations to ensure consistency within our participating laboratories, and the comparability among those laboratories.

Sampling sites have been selected to be representative of general conditions within the areas in which they are located. Our objective is to monitor changes in levels associated with human activities and to assess the effectiveness of the control strategies. Since our data are spatially and temporally limited, our analyses must be viewed as very preliminary, however, and must be interpreted with caution.

The data reveal, however, the truly national extent of the problem of toxic contamination of sediment, fish, and shellfish throughout the coastal waters of the country.

Our preliminary results present a mixed picture of trends in coastal environmental quality, and indirectly reflect mixed results in our effectiveness in reducing levels of these pollutants in coastal and estuarine environments through management actions.

Trends in estuaries and the fisheries they support are of particular interest. Estuaries are positioned at the downstream end of coastal watersheds and receive water sediments and other materials from large land-drainage basins. These materials include the

continuous addition of nutrients from both natural and human sources.

Increasing evidence of reduced fish catches, loss of habitats, and degradation in water and sediment quality caused by nutrient overenrichment indicates that nutrient discharges must be limited.

And I guess that goes without saying. Working closely with the Environmental Protection Agency's Office of Water, NOAA has begun a nationwide study to evaluate the status and susceptibility of the Nation's estuaries to excessive discharges of nutrients.

For a preliminary assessment of almost 100 of these estuaries in our estuarine inventory within NOAA, 29 are expected to exhibit medium to high concentrations of nutrients. The sensitivity of estuarine biota, coupled with high nutrient loads, would make them good candidates for a more detailed analysis and possible additional management actions to reduce levels of nutrient discharges within these estuaries.

Based upon an examination of the quality of shellfish growing waters in over 100 estuaries, NOAA has also determined that, in 1985, for example, over 9 million acres, 65 percent of the total waters suitable for shellfish growing, were approved for harvest.

Two-thirds of this approved area is found in the three largest East Coast estuaries represented by Members on this Committee, namely, the Chesapeake Bay, the Pamlico Sound, and Long Island Sound.

In these estuaries, almost 50 percent of classified acreage is not productive because of extreme salinities or lack of suitable depth, substrate, or habitat for molluscan shellfish.

A recently released series of NOAA reports detailed the status of shellfishing waters of the U.S. The current trend is one of changes in primary harvest centers. In the oyster grounds of the Mid-Atlantic, the diseases, MSX and dermo have devastated the resources there. Harvests of oysters has shifted to the Gulf Coast as a result of that.

The decline in fresh-water inflow is affecting the Gulf production, forcing the industry to increase culture and relay activities.

In Maine, North Carolina, and South Carolina, closures due to paralytic and neurotoxic shellfish poisoning caused additional closures beyond those experienced due to pollution. And clam harvests have shifted also from coastal New York to the Indian River of Florida due partially to new Florida programs that allow for relay and depuration.

Coastal wetlands are one of our Nation's most important natural resources. They provide critical habitat for fish, shellfish and wildlife, filter and process agricultural and industrial wastes, and buffer coastal areas against storm and wave damage. They also generate large revenues from a wide variety of recreational activities such as fishing and hunting. Unfortunately, coastal wetlands continue to disappear in many areas at an alarming rate.

Losses can have far-reaching effects. NOAA has estimated that loss of estuarine wetlands in the United States between 1956 and 1978 have resulted in an annual loss of hundreds of millions of dollars in fisheries products.

Furthermore, rising costs and demand for waterfront property will cause increased competition in coastal areas for limited space.

Now with respect to NOAA's role in these efforts, let me point out that over the next 10 years, NOAA, as well as EPA and State Governments, will be making decisions about the use of coastal waters that will determine whether this economically and environmentally important area will continue to be a valuable national resource.

Of course that issue is the subject of the bill that has been introduced of which we are talking now.

NOAA, we believe, plays a vital Federal role in developing and implementing solutions to many of the problems confronting the coastal waters of our country.

That role includes legislatively-mandated responsibilities for living marine resources, as well as providing predictions, advice, and the sound scientific basis for environmental decisions made by other State, local, and Federal agencies.

SImply stated, I think the NOAA mission in this regard is to provide information and science to make effective environmental decisions possible.

This focus on developing information for the Nation's coastal ocean decision-making is enhancing the nature of the traditional role of NOAA. It requires fundamental changes in the types of products that we develop, the services we provide, the data collection, research and assessment activities that we undertake, and the timing and the manner in which these products, information and services are developed.

This changing environment is represented in the initiative that we have put forward in our current budget request that we are calling the Coastal Ocean Program.

The Coastal Ocean Program began in 1988 with management initiatives aimed toward revitalizing and refocusing its activities in support of three primary program goals.

The prediction of coastal ocean degradation and pollution; conservation and management of living marine resources; and the protection of life and property in coastal areas.

The fiscal year 1990 budget request of the Administration, which is of course currently under review by the Congress, in addition to fully funding the National Status and Trends Program of which I have spoken, focuses on activities within NOAA's program goal for prediction of coastal ocean degradation and pollution.

Our efforts are designed to improve NOAA's ability to monitor, assess, and predict coastal environmental change caused by pollution and other man-made and natural events. The products of these endeavors form important elements of coastal management strategies.

Attacking the problems of coastal pollution will require, of course, a long-term coordinated Federal-State approach, in concept similar, I think, to efforts underway to improve the Nation's air quality. That sort of approach, I think, in many ways is represented by the bill that has been introduced.

The Coastal Zone Management Program which we oversee was established to create a comprehensive management umbrella for the beneficial use, protection and development of the resources of our coastal areas, and I think forms the foundation upon which a

production strategy can be met, together with many of the approaches I think represented in the bill.

Over the past year, NOAA's Coastal Zone Management Program has worked closely with EPA's Office of Water to coordinate the efforts of State Coastal Management Programs toward improving water quality, with efforts to strengthen State and local management actions within individual estuaries included in EPA's National Estuary Program.

For example, to the extent permitted by law, States will be required to submit comprehensive conservation and management plans developed under EPA's National Estuary Program for incorporation into approved Coastal Zone Management Programs, after approval by the Governor and the EPA Administrator.

NOAA is providing scientific support and technical assistance to EPA for the development of national guidance on the management of water quality programs to address more effectively the health of living marine and estuarine resources.

We look forward to continuing to work closely with other Federal agencies, the State agencies, and certainly this Committee, and strengthening our collective efforts to improve the quality of our coastal environments, and specifically, we are anxious to work with the Committee with regard to the legislation of subject.

Again, I believe it represents an excellent beginning towards an effort which I think can be constructively implemented and we are anxious to work with the Committee on that.

With regard to some of the specifics, I note the points which Rebecca Hanmer noted, that represent general areas in which they believe, the EPA believes, areas that need to be addressed under the bill. Certainly nonpoint-source controls has got to be, I think, a central feature of any particular remedy that is conceived by Congress and we are supportive of that, noting that nonpoint sources are illusive but yet represent 50 percent of the problem at least.

The funding issue, obviously—it goes without saying--has got to be clear, and it is good to note that the bill represents an effort to identify funding opportunities already in place.

To the extent we can identify those authorized resources and appropriate them for use into this area, I think it would be terribly useful.

Flexibility in solutions, flexibility in terms of not mandating any specific fix, but perhaps outlining goals and principles under which States can operate, I think is a useful approach to take under the bill.

And more comments perhaps would be appropriate later, Mr. Chairman. I appreciate being here and look forward to working with the Committee in addressing these important areas. Thank you.

[The statement of Mr. Burton can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much, Mr. Burton. Next, Mr. Robert Perciasepe.

STATEMENT OF MR. PERCIASEPE

Mr. PERCIASEPE. Mr. Chairman, and Members of the Committee, I want to thank you very much for giving me the opportunity today to speak a little bit about the Chesapeake Bay Program and a little bit about 2647.

As the Chairman said, my name is Bob Perciasepe, Deputy Secretary from Maryland. I also am involved, on behalf of the Governor, in the Chesapeake Bay Program and serve on the various interstate committees related to that.

So I will speak with a couple of different hats, I guess, today, a little bit on a State, a little bit on the interstate group that works on the Chesapeake Bay.

Everybody at the table here has been involved with the bay, to one extent or another. The Chesapeake Bay. The Environmental Protection Agency is a strong supporter. NOAA is a strong supporter, and even Bill Eichbaum, over here to my left, in his previous life, was also very heavily involved with it. So questions on that will be probably very well answered today.

But I wanted to take a few moments to point out some of the things that I think are the central reasons why the Bay Program is moving ahead and working, and is looked to as a model by some, and then a little bit of how I think it relates to the bill and some preliminary comments on the bill.

I want to point out also that these comments are very preliminary today. As with the colleagues at the table, we have just received the bill recently, we have started to look at it, and we certainly reserve, you know, an opportunity to come back with more detailed comments in the future.

On the Bay Program, there have been hearings by these committees. There has been a study on coastal waters in jeopardy, that pretty much outlines what we all know to be the general problems with the coastal waters of the United States.

I think the bill is in the right direction, as the time is now to try to frame out exactly how we are going to march down the road to solve these problems.

So looking at the Bay Program and how we are, as an interstate group, marching down the road, I think one of the important aspects of it to keep in mind as we work on this bill over the next several months, is that the Bay Program is regional in nature.

It involves Maryland, Virginia, Pennsylvania, the District of Columbia, the Federal Government, the Chesapeake Bay Commission, and, to a smaller extent—although they are not an official signatory—the State of Delaware, particularly in some of the monitoring programs.

Even today as we speak, Maryland and Delaware are working together. We are supporting the State in its efforts on the oil spill in the Delaware Bay and we have a relationship with our neighbor States in that regard. We provided some equipment and personnel to them.

The other aspect of the Bay Program that I think is important is that it is well-coordinated. There are a number of interstate committee structures that keep the technical staff and the policymaking staff of all the States and all the signatories to our agree-

ment involved in the program, and I think the most important interstate committee is the one that is made up by the Governors of the State, and I will get more into the Governor involvement in a minute.

I think it is very important that Governors be involved with these programs that the States are going to have a major responsibility in. There are also technical committees. Another important aspect is interstate citizens' involvement. In Maryland, we have 1 million Marylanders for the Chesapeake Bay campaign. I do not want to underestimate, or underplay the importance of public involvement in all these efforts. The public must be continually involved and made aware of where we need to go and why we need to go there.

The other important thing about the Chesapeake Bay Program I think is the 1987 agreement, and not so much that the States got together and signed an agreement. Many entities sign agreements. But the fact is that this agreement is quite comprehensive in its scope, and I think that is something that needs to be brought to bear, and is being brought to bear in the legislation that I very briefly looked at in 2647. It is this comprehensive approach to coastal problems that is important.

For instance, the agreement has a whole component related to water quality and we have gone through a little bit of detail here on all the related water-quality issues. I also want to emphasize the nonpoint-source side. That is about 50 percent of the problem in the eutrophic parts of our coastal waters.

The "living resources" aspect of it. How do we manage, regionally, or on a coastal basis, some of the fisheries and other important, ecologically important species that we have to deal with? How does that relate to the water quality improvements we are making?

We must continually try to make these links between our water quality improvements that we are spending a lot of money on, and a lot of time trying to achieve and identify. We must identify the links. Are those the right things to do to improve the living resources and the health of the citizens in the area?

A third part of that bay agreement which I think is extremely important and is very well included in the legislation we are talking about today, and that is the population growth and development aspect of the bay agreement. The States have agreed to look very hard at how the population growth and the development patterns and the bay drainage basin are affecting water quality.

Here is where we are getting into that 50 percent of the problem on nonpoint-source pollution. We are starting to address what Rebecca has brought up, and NOAA has brought up, in terms of 75 percent of the Nation's population living in coastal and near-coastal waters, and that pattern is not changing.

How do we reconcile that kind of growth with our strong desires and our financial commitment to preserve and enhance these coastal waters?

That must be a necessary component of any coastal defense action that the Congress would take. Public access and public education. I already mentioned the fact that there needs to be strong public involvement.

And the last thing that the bay agreement has in it— which I also mentioned already—and that is governance. How do we all work together to do this?

So I think the strong points are—and then I will get into some of the transferable points—the strong points are there is a tremendous partnership. You know, people working together, whether it be Federal, citizens, the scientific community, and interstate, and you must involve the principal policymakers in those groups to do that.

The Federal support is essential. You all know that if the Federal Government does support the Chesapeake Bay Program through many agencies—not the least of which are the two at the table today—technical sophistication. These problems are complex. The transmitting of this information to the citizenry and to the policymakers is not always an easy task, but there needs to be the technical sophistication underlying, as a foundation upon which policy decisions are made.

We must not march down the wrong road in large dollar investments on behalf of the public, and there is a great deal of effort that has been put into monitoring and modeling of the problems that we have in the bay. I will mention some of that in a minute. Also, again, direct involvement of the principals and Governors.

What I think is transferable to other areas in the country, and I think is workable within the framework of the bill we are discussing today, again, is that strong Governor involvement.

A comprehensive approach. The strong interstate agreement and approach to the problems. In virtually all the coastal waters—and I will not say all of them, but a lot of them—an interstate approach is going to be necessary.

And I add in here: There has got to be a way to include the noncoastal areas that are having a very direct impact. Now then that starts to sound comprehensive. What about the Mississippi River? How does that impact the Gulf of Mexico?

But for instance, in the bay agreement, the State of Pennsylvania is a very strong partner. Fifty percent of the fresh water coming into the Chesapeake Bay comes from the Susquehanna River. Only a very small part of that is actually tidal and coastal.

But they need to be involved, and how that involvement works is something that needs to be considered.

As I mentioned, the strong interstate coordinated monitoring and data-collection program. We have an interstate technical monitoring committee. I think you have one former, and a current Chairman of that committee here today.

But I cannot underestimate, again, the need for that technical data. You need some flexible institutional arrangements.

The States have to have some flexibility on deciding who is going to deal with land-use issues, et cetera, and there needs to be a little bit of flexibility there.

The Federal incentives must be there. In my written comment there it says "Federal inventives." It should say "Federal incentives." But, either one. We will take them both.

But the Federal incentives are very important, and I do not mean just technical support, and moral support, which we get sometimes, but also the financial support. And there is a small

amount of financial support, which your bill envisions as well for these efforts.

And then there is the emerging emphasis on land-use impacts and their analysis, and their ultimate solution. I think these are very important and these are transferable parts of what we are doing in the bay and they fit very nicely into the framework of the bill that is represented by 2647.

Let me just make some very brief observations on the bill from a very cursory look.

First of all, as I said, this bill is in the right direction. Many of the good points that I have already mentioned are built into it. But I think, in particular, the most important parts of the bill are the land-use planning aspects of it, the monitoring aspects of it, the technical assistance aspects of it, and the financial support and incentives.

Those things must work together in a cooperative mode to make things happen, and now is the time to make things happen and I think that is what we are trying to do with this bill.

On the water quality side, the goal of a national consistent kind of water-quality standards for coastal waters I think is a plus. I think that when we get into it in more detail, we are going to have to recognize some regional need for flexibility on that.

But I think the debate that will be generated by even talking about that will be very good.

On coastal management, the need to address population and land-use development is an absolute must. This is an important, and very important part of the bill. But again, the States will need a little flexibility on this.

To prescribe, in the Federal legislation, that the States should use this office, or this kind of office, could create some locally—I mean regionally, in the United States—difficulties.

For example, in Maryland, we have a Critical Areas Commission, and some far-sighted legislation on controlling land use along the shores of the Chesapeake Bay. That Critical Areas Commission is not necessarily part of the Coastal Zone Management Program.

However, they work together in a memorandum of understanding. In addition, Maryland has recently enacted, which will take effect in another couple of days, some far-reaching wetlands protection legislation. Again, that is another entity in State Government, operates on that, and there will be memorandums of understanding between that group and the Coastal Zone Management Program.

Not to mention the fact that many States have State land-use planning programs at the State level that will also need to be involved.

So, take care in crafting that part of the bill. That the flexibility is there for the Governors to figure out who they want dealing with that very sensitive issue of growth, and that the people that they have dealing with it are the right ones.

On monitoring, this is an absolute. In order to manage the water quality planning and assessments that must take place to make the right decisions, there must be a good monitoring program in place. The bill recognizes that probably in the strongest ways possible.

I would recommend that in future hearings, as you get down the track on this, that you might want to have a session with EPA and

the States in the bay area to go through the monitoring program that has been in place there since the early part of the 1980's.

It is a strong program, it is a consistent program across State boundaries, and I think it is answering and developing the kinds of support that is needed to make the right decisions.

But I might want to also add on monitoring that there is an emerging science of monitoring. In some people's minds it has probably emerged farther than mine. But that is that of the living resources monitoring. We have got to know where we are with the living resources as well as the water chemistry, because here is where you start to make those links.

And I am not just talking about juvenile indexes of certain sports fisheries. I mean plankton as well as those other ecologically-important species. We have to know where those populations are, and there needs to be a coordinated, consistent monitoring program, as well as on the water chemistry side, so that we can make those linkages.

I guess the last thing I would like to mention in the bill, and give some very preliminary comments on is the funding. This is an important component of that incentive part of the equation that I mentioned, and I do not want to, again, understate that part. There is a small amount of Federal support for the Bay Program.

I think the return on investment to the Federal Government, in terms of what is going on with the States around the Chesapeake Bay, for the amount of money that the Federal Government is investing there, has been tremendous, and is helping other national programs.

And I think when you look at it from an investment standpoint those are very strong things. States will need some time to work on the way the bill is envisioning how the funding mechanisms will work, and I am sure we will be getting back to you with more information.

I want to also mention on the funding side, there are some things mentioned in the bill as being eligible and ineligible, or ineligible by not being mentioned. I want to echo NOAA's comments, and that, is nutrient control in the eutrophic coastal waters is very important, very difficult to finance, and I think that if we ought to look hard at making that an eligible component of the funding cycle, whether it be nonpoint sources, or, to some extent, some kind of incentive on the point-source side, to mix in with the Revolving Fund Program.

But again, this is an absolute necessity to make the program work, to have some funding as an incentive, and, you know, to get States to do the plans that are necessary to move ahead.

This concludes my very brief statement. I have tried to give a little example of what is going on in the bay, which I think you probably all have heard before, but how I think it relates to the legislation, and some very preliminary comments on the legislation. Thank you.

[The statement of Mr. Perciasepe can be found at the end of the hearing.]

Mr. STUDDS. Thank you, sir. Finally, we go to Mr. William Eichbaum, whose real qualifications for being here are not on here. It says here you are an attorney and a consultant. We are going to

hear you, notwithstanding those two things, because you have experience with the States of Maryland and Massachusetts, and precisely what we are talking about. Welcome.

STATEMENT OF MR. EICHBAUM

Mr. EICHBAUM. Thank you very much, Mr. Chairman. As you indicate, for the last decade, I have served in environmental management positions in both the States of Maryland and Massachusetts, and in the decade before that spent time in Pennsylvania and with the U.S. Department of Interior. Those latter positions are not very relevant to the issues before us today.

I have also, for the last year and a half, served as a member of the committee of the National Research Council, looking at the question of the use of monitoring and the design of monitoring systems in the marine environment, particularly as they are used by public managers. So that may be somewhat helpful to your deliberations.

I would like to commend the Committee. I think the work that has been done over the last year and a half to examine this issue by the Chairman and others, and the introduction of 2647 is obviously important, and as the other members of the panel have said, very, very timely.

I would like to address three, and perhaps four, if it does not take up too much time, specific issues which are raised by H.R. 2647.

The first of those has to do with the growth management question and the effort by this legislation to improve the degree to which the Coastal Zone Management Programs address that issue, and also to link that improvement to our water quality programs that are administered in the States and by EPA. This is extraordinarily important.

There are two preliminary points I would like to make. One is, if we improve water quality, that is not going to matter if the habitat conditions which are so affected by land-use activities are not preserved so that the living resources—which is the bottom line—are able to be viable.

About 80 percent of the commercially important fisheries resources in the United States spend a critical period of time in the coastal zone. What is important there is not just the water quality, but the peculiar set of habitat circumstances that may exist. For example, the mix of fresh and brackish water for the spawning of anadromous fish or the submerged aquatic vegetation in the more estuarine areas for the protection of juveniles. That habitat has to be there.

The impact of growth is significant because the development that we have heard about is destroying that habitat. That is well illustrated if you take a look at Tampa Bay. The City of Tampa has done an extraordinarily good job in building what is probably the state-of-the-art sewage treatment plant in the United States, for a city of its large size, with both biological nitrogen and phosphorus removal.

And the result of that plant is that you do see an improvement in water quality in Tampa Bay, but, at the same time they have

not seen a return of the living resources, which is what they are trying to achieve, and one of the reasons for that is that as they have built that sewage treatment plant, they have also filled in the marshes, destroyed the wetlands, and therefore deprived those habitat resources.

And as somebody said to me down there once: "Baby shrimp don't like to cuddle up to concrete bulkheads very much." I think that illustrates it.

I think a second important point, is that I think there has been a real change in the understanding by the American public of the relationship, particularly in our coastal areas, between the development of land, and the destructive impact which that development can have on environmental and especially our coastal resources.

And I think that the dynamic has changed where, in this session of the Congress, it will perhaps be possible for the Congress to begin to legislate, acknowledging Mr. Perciasepe's concern about recognizing the peculiarities and the circumstances of each of the States and the regions, in this direction.

And I think that the proposals in Title III of 2647 are very, very significant, and appropriate. I would make two suggestions, two other comments. One is that in many ways the reach of that title is limited to either very pristine areas or to those areas which are degraded. That is appropriate. We need to clean up areas and we need to protect high-quality areas. But one of the things that we found in enacting the Chesapeake Critical Areas Commission in Maryland, was that probably the major threat to the future condition of our marine waters, the tidal estuaries, was the sort of subtle and insidious development that occurred typical rural lands. So I do not think that we can neglect that great bulk, if you will, of what is the land resource at the coast's edge.

The second point I think that is worth mentioning is the direction to EPA to consider—from an environmental protection perspective, from a water-quality perspective—whether the definition, if you will, of the coastal zone is appropriate. This is also an important suggestion.

Section 320, the bays and estuaries section of the Clean Water Act, sets up processes for EPA and the States to look at the broad region, as again Bob Perciasepe mentioned by illustrating the problems with Pennsylvania and the flows from the Susquehanna. I think assistance, again, from the Federal Government in moving in that direction, as we look at the contributions from these inland riverine areas, and the impact of development activities is very important.

Turning to the issue of monitoring, I think that the requirement in this bill that there be established a national system of monitoring is very important. Notwithstanding the significant work that is being done by NOAA, especially with the Status and Trends Program. There is not now an adequate national system for understanding the condition of our coastal resource, the trend in that condition, and the reasons for that trend. We need to know, as a manager, what we can do about the conditions that we find.

We need to put that monitoring system in place. I think that there are a couple of points I would make about it. One is, we now spend in this country in excess of $100 million a year on monitor-

ing in our marine environment. We can probably do a better job with that same amount of money. I am not sure that this is an area that requires major new investments, although I think some elements of what we are now doing, such as the Status and Trends Program do need greater resources.

Secondly, I do not think we need to have a uniform system of coastal monitoring. There are those areas, such as Narragansett Bay, Puget Sound, San Francisco Bay, Chesapeake and others, that may require, and it may be appropriate to have intensive monitoring systems. Then we need to build a system of less intense, if you will, monitoring, that links up those intensive areas. The entire system should be designed in a uniform way as this legislation would propose.

Finally, I do have some concern about the intensity, if you will, and positive intensity of the cooperative relationships between NOAA and EPA, and I think that the suggestion contained in H.R. 2647 to establish a task force to try and provide national leadership to this monitoring effort is perhaps one way of addressing that question, and it is certainly to be commended.

In the enforcement area, as we all know, we are all too guilty of enacting statutes and not considering the enforcement implications adequately, and I think that the fact that this proposed legislation does that, is also important.

A couple of elements. One, the prohibition of discharges that are in violation from being able to receive Federal Government benefits is an important step, and I think ought to be not only in this legislation but in other legislation where it is not; although, I do agree with Ms. Hanmer, that some of these steps could perhaps be taken in the absence of legislation.

I think the recognition of the role of the environmental auditor is a very important feature of the enforcement provision. We need to create this system of independent experts evaluating the condition of our environment, who have neither a stake within the Government nor a stake within industry, but, really, have a stake in honest reporting of the condition of dischargers, the condition of the effects of their impacts on the environment. This is analogous to what has been created in the financial area by certified public accountants, where they play a very important role in the policing of our financial matters.

And I think the same thing can perhaps be created in the environmental area, and ought to, again, be considered in other areas, and the legislation I think is appropriate in having raised that issue.

Finally, I think that there is some danger in the use of words like "substantial" and "significant," and there is some lack of clarity in what the consequences would be of these enforcement proposals in the bill. I think they need to be made more crisp, if you will.

For example, if in fact a discharger fails to pass the audit, then the permit should not be renewed, period. I do not know whether that is implicit in the language, but it ought to be made explicit.

A final matter to touch upon is the role of water quality standards. I think there are two points I would make in this regard.

One is that the structure of the statute which as proposed, suggests a strategic approach; that is, identify criteria, identify stand-

ards, and then in a strategic sense move to sources and control strategies is absolutely appropriate, and it is something that we do not do in a coherent fashion very often.

On the other hand, I would be somewhat cautious about putting too much faith in the capacity of science, of our system of administering these programs, to be totally successful and comprehensive in this area.

In 1972, we threw out the water quality standards approach with the adoption of the amendments to the Clean Water Act, in large part, and relied on technology. We are now beginning to see that we probably went too far, and it is important to bring back the importance of water quality standards.

But if there were concerns that that system could not work well with simple problems like dissolved oxygen in the Delaware River, at the City of Philadelphia, and Wilmington, when we begin to think about using that system literally in the very complex area of the marine environment and the complex mix of pollutants, we do not want to put too many eggs in that basket.

I think the strategic element of the approach is very important. We need to be careful about the details.

With that, I will conclude my formal remarks and be happy to answer any questions.

[The statement of Mr. Eichbaum can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much. I am half tempted to call a markup this afternoon of this bill. Higher powers have cooperated in focusing people's attention. We may need a couple of more strategically-placed spills or incidents to round up the necessary regional support for the bill. If you folks could arrange one in the middle of the country, and perhaps one in California, we would pretty much have the coast covered and I think we could promptly move while the cameras are still on. We have a way of focusing on the crisis of the moment.

This is not a crisis of this moment, obviously, and it is going to far outlast the particular focus of public interest, but the time certainly is ripe, as many of you have observed.

Both the nature and the intensity of the problem, and the very intense public concentration on the problem at this moment, and I hope we will seize that moment and proceed.

Nobody had any unkind words about the bill. If we have unanimity with respect to the bill—the Administration is strongly in support of it as I understand it—I will simply proceed.

[Laughter.]

Mr. STUDDS. Let me, first of all, ask Ms. Hanmer and Mr. Burton this. I assume that it is asking too much to assume that your comments broadly supportive of the bill reflect the official position of this or any other Administration?

Mr. BURTON. Unfortunately, I am afraid that is right, Mr. Chairman. The official position of the Administration on the bill is simply no position at this point. Like others, we had the benefit of having the language in hand only for a brief time.

Mr. STUDDS. I realize that.

Mr. BURTON. On the other hand, I can certainly note, as the Committee well knows, that the Administration is certainly com-

mitted to a clean environment, as is noted by the introduction on the part of the Administration of clean air proposals, and I would certainly have to believe that legislation such as this before the Committee, that has as its goal the addressing of coastal problems, is something that we cannot ignore, and indeed, we want to be constructive in terms of working with the Committee to make sure that legislation is meaningful and something that can be implemented, and is sound fiscally at the same time.

Mr. STUDDS. Whoops.

Mr. BURTON. Sound fiscally.

Mr. STUDDS. Yes.

Mr. BURTON. I think that is a safe, non-threatening term. But with that spirit, yes, the Administration, I have got to believe, is anxious to be constructive and work something out.

Mr. STUDDS. Well, we are all greatly relieved that the Administration is anxious to be constructive.

Mr. BURTON. I knew you were waiting for that.

Mr. STUDDS. We will continue to encourage that anxiousness. Perhaps even some day we will get beyond the anxiousness to the constructive part.

I assume that the key appointments in both of your agencies are yet to be made. Is that still the case?

Ms. HANMER. You mean political appointments?

Mr. STUDDS. Policy-making appointments. Political or otherwise. Those people who will have some authority to speak for the Administration, which we continually keep being reassured is interested in these matters.

Ms. HANMER. Well, certainly, we do not have an Assistant Administrator for Water at this point, but we do have an Administrator and Deputy Administrator. So I do not think we feel a lack. It is more that the issues—the details in your bill are quite complex and especially in terms of the funding issues, we are just getting up to speed ourselves. For years, we have looked at the area of Federal funding through fees, and have decided that the administrative costs outweighed the advantages.

So we are slowly changing our mind about that, but now, as to the details, we are playing catch-up.

Mr. STUDDS. OK. And I am not being facetious. I do not mean to press you. This is a long, complex bill, and it has not been available for a long period of time. I understand that and all of us, I am sure, will be wanting to make changes, but I just express my strong hope that the Administration will move from the level of general support for things environmental to actually being for and against things, and having positions that we can discuss.

We very much want to work with you on that. For one moment, before I get to the question of funding, which is the inevitable one, and the caveat with which Mr. Burton clothed his final general endorsement.

Funding questions aside, do any of you see major questions in this bill which jump out at you as both major, and subject to probably controversy?

Where are the matters which most likely are going to engender real controversy? Matters of substance. I am not interested at this

point in some of the kinds of things that we, in Washington, sometimes think are important, like who will administer something.

But where do you see in here—funding aside for the moment—matters of considerable substance on which controversy has arisen or is likely to arise?

Mr. BURTON. I will jump in there, Mr. Chairman, and suggest that—I am going to offer up a conundrum without a specific answer but——

Mr. STUDDS. You are going to offer up a what?

Mr. BURTON. A conundrum.

Mr. STUDDS. That is what I thought you said. OK.

Mr. BURTON. Which itself is confusing. I noted earlier in my comments, that the nonpoint-source control issue is terribly serious. I believe all the panel member shave conceded that and we all agree.

As to addressing that problem with the land-use amendments as proposed by the bill on coastal zone management, that may tend to be controversial, and I am not projecting a specific position on the part of the Administration.

Mr. STUDDS. Heaven forfend. We would not expect that; no.

Mr. BURTON. Of course not. But I can imagine those who would hesitate to proscribe if it comes to that, any prescriptions for land-use schemes that would threaten some people's sensibility as to the propriety of the Government doing that. As simple as that.

Mr. STUDDS. Is that still the loaded term that it once was? Twenty years ago in this city, if you said "land-use planning," the room would empty, at least of officeholders, and the others, they would be running to the Floor to give a speech about you know what taking over the Nation.

Does that still hit those kinds of raw nerves or do we have——

Mr. BURTON. I am not in a position to say it is a loaded term or not, but I think it is with some, and I think it is a threatening concept with some. But, on the other hand, to address the problem of nonpoint-source controls, I cannot sit here and anticipate or suggest another scheme to get at that.

Certainly, we need to recognize the prerogatives of State and local planners to address this issue themselves. How heavy-handed the Federal Government gets in terms of directing those efforts with specific solutions at least raises I think yellow flags in some people's minds.

So I offer that up, and just in response to your general question, that may be an area of some concern.

Mr. STUDDS. Thank you. Anyone else want to pitch in on that one? Ms. Hanmer.

Ms. HANMER. I would say that the biggest issue is probably how the fee system would be set up and the equity. In our program, of course, we have a mixture of delegated and undelegated functions. We are performing some State-like functions and delegated States are.

Many of our States already have fee systems, so how a national fee system would work out in terms of existing State systems I think will be somewhat difficult to work through, and perhaps controversial.

The bigger issue is the equity of dealing with coastal dischargers and what you mean by discharges affecting the coast, as opposed to discharges in general.

There is a national water quality standards issue. I do not know how controversial that will be, but certainly, the bill is a major departure from the way in which we have approached the program under the Water Quality Act, which is that we put out national criteria, but we give the States flexibility to set the standards.

I am not sure what would be gained by setting national water quality standards as opposed to following a more urgent course than we have been on national water quality criteria.

The waiver of sovereign immunity for Federal facilities may be an issue, and the extension of 403(c). We have been looking through our administrative mechanisms, at how could we do a better job of introducing a needs test, and also enhanced biological assessments for all discharges to the coast and not just ocean discharges now covered by 403(c).

However, this is a very expensive proposition, both for Government and the dischargers, and so expansion of these kinds of requirements I think would be controversial.

But I also think some expansion is necessary.

Mr. STUDDS. Mr. Eichbaum.

Mr. EICHBAUM. Mr. Chairman, if I could comment for a moment on the land-use question. I think, as I suggested in my remarks, there is a difference today from the conditions that prevailed 15 years ago, when not only the national Government, through the National Land Use Bill, but also States, such as Maryland, with an effort in the Maryland legislature in the early 1970's to regain some responsibility and direction of the land-use processes—those efforts failed.

And I think one of the reasons they failed was that it was not apparent to the public that there was a crucial nexus, if you will, or a real linkage between the quality of their lives, the quality of their environment, and the land-use decisions that were being made.

Today, I think that has changed, whether it is in the suburbs of the Nation's capital, whether it is along the coast of Massachusetts, whether it is on the West Coast, or wherever—I think people do understand that there is this relationship and that there is a deterioration in the quality of their lives and their environments because of many areas where there is inadequate land use decisionmaking.

Now I think the fact that in Maryland we could enact a Chesapeake Critical Area Commission in 1984 and regain some of that responsibility illustrates the willingness of the public and political leadership to deal with this issue.

So that while controversial still—I agree with Mr. Burton, it will be one of the debate points—I think that the playing field, if you will, has been defined in a very different kind of way.

Mr. STUDDS. Very good. It is not compulsory. Mr. Perciasepe, did you want to respond?

Mr. PERCIASEPE. Yes. If you are looking for a very rough and very preliminary—you know—the yellow flags were part of the bill, are likely to be "sensitive," to use that word—and obviously

the land use won out, and talking from a State perspective, States, like local Governments being concerned about the State telling them what to do—you know—obviously you are concerned about the Federal Government telling them what to do but they want to work together.

And so I think that the land use part of the bill is going to be sensitive. It is an essential part of the bill, and I testified to that regard, and I do agree with Bill, that local sensitivities are changing, and I threw out the example of the critical area program in Maryland where there is State land-use controls, to a certain extent, on a large part of the coastal area.

But the sensitive part of it is going to be there, and the Governors are going to want to have some ability to determine how they deal with it in their Stats, and I mentioned that before. Three other quick ones. The funding part is a must.

Mr. STUDDS. Funding aside, for the moment.

Mr. PERCIASEPE. OK. You want to leave that aside. The standards, the national standards, as I said, are going to be controversial, and I think—as I mentioned, and I think Bill mentioned—they are going to be something that generate a lot of debate—you know—and there are philosophical views on both sides, and I think that is going to be a sensitive area.

And I think the enforcement part of the bill will be sensitive in some respects. One thing we have to be real clear on, and the sensitivities of the States, I think are going to be looking at, is how do these enforcement measures in this bill measure up against the existing enforcement mechanisms that are in place, or their need to be tooled up to work properly? You know, just laying more and more enforcement measures on top of existing enforcement measures that may or may not be working. It is something we are going to be sensitive to, and that will probably enter into the dialogue as well.

Mr. STUDDS. Thank you. If I were a tyrannical Chairman and allowed myself more time in this round, I would go to the question of funding. Just in case other Members pick it up—if they do not, I will come back to it. But let me make one observation. When we had our press conference a few weeks ago with Members of the Senate, we announced the introduction of this bill, and I think three different bills in the Senate.

I observed at the time, and I will observe now, that this is the only one of those bills that has any funding mechanism of any kind. It may not be the wisest or the best, but at the moment is it is the "onliest", and we are, to put it mildly, hallucinating, if we think we can solve this problem without—among other things—additional resources, maybe far more than we envisioned even in the funding mechanism of this bill.

I would like you all to be thinking about it. As I say, other Members may pick this up in their turn, but if they do not, I certainly will come back to it.

That is, first of all, is the general order of magnitude of the funding we envision sufficient, or is it a drop in the bucket, or is it somewhere in between? And secondly, what do you think of the mechanism?

Now I do not mean, for one second, to suggest that this Administration has, or perhaps ever will have a position on this question, but, if we do not, we might as well save us all the speeches about being concerned about the matter, because, as I say, one of the sine qua nons, certainly, is additional resources. The gentleman from New Jersey. The other gentleman from New Jersey.

Mr. SAXTON. Mr. Chairman, and Members of the Committee, touching on this subject of land use for a moment. Being from New Jersey, particularly those of us who represent coastal areas, we are very sensitive to the subject of land use, and it is something that has been a subject of a great deal of discussion and legislation on the State level in New Jersey, and legislation on the Federal level.

I point to our Coastal Facilities Review Act, I point to the Pinelands Act which is a national Act that was passed in the 1970's, and to the State Act, subsequently passed by the State. And one of the difficult aspects of land use, for my State, as well, I am sure, for those States across the country who have experimented with it, as we have in New Jersey, is that there is a very difficult balance to be gained in terms of the local participation and the input of local office-holders and State officer-holders. That balance is not always met satisfactorily to everyone.

Those of us who represent coastal areas along the East Coast, for example, have barrier islands to consider, and people who own property on the barrier islands are very much concerned about the environmental impact of what we do, and yet, at the same time, they are very protective of their local ability to control land use and zoning.

I guess the question is: Have you seen examples of where federally mandated, federally prompted land-use laws have worked well, and under what conditions have they worked well? And have you seen some that have not worked so well, and why haven't they worked well? Mr. Eichbaum.

Mr. EICHBAUM. That is a tough question. I have an 82-year-old relative who has her house on Long Beach Island.

Mr. SAXTON. That is my district. Thank you.

Mr. EICHBAUM. And she built it in the late 1930's and she built it on the bay side of the ocean road. So she did not build it on the dunes, and, in the 40-some years that I have been going down there, the only lot on the ocean side, on the dunes, that has not been developed, is the one in front of her house, and it is now worth about $500,000, and she does not want to develop it.

So there are, aside from those personal considerations, there are individuals who care about the use of the land, and that is why I think there is a hope to move forward. I think the Pine Barrens is a good example, as I understand it, of a statutory scheme by Federal, State, and local officials, which does make an effort to allocate the decision-making responsibility, and seems, as I understand it—and it is fairly distant—to be working fairly well.

There have not been very many efforts to do this at the Federal level. The only other one that I can think of are some of the provisions of the 1977 Surface Mining and Reclamation Act enacted by the Congress, where there were efforts to have the reclamation process relate to land-use decisions, and the decisionmaking about

whether or not to allow surface mining of coal depend upon subsequent land use that would be proposed or that land.

Those, I understand, have not worked very well. So I would say there is a very small track record, and the picture that emerges is probably relatively spotty. I think where one needs to look is to the experiments that have taken place in the States in the last 5 or 6 years, where the States have gone through this effort—such as you have in New Jersey, such as we did in Maryland, the Lake Tahoe experiment, which is now a number of years old, and others—to look at that question of allocation of political responsibility.

You are clearly correct, that it is crucial—I think there are two questions—the allocation and the accountability. I think perhaps one of the concerns that will emerge about this proposal is that the approval responsibility for the plans resides within—as I understand the legislation—the Coastal Zone Management Office and NOAA, and I think there may be some interest by various actors, and as Bob has said, particularly Governors, that there be some broader mechanism for that approval process that is more representative and accountable.

I think those are the kinds of things that will have to be wrestled with.

Mr. SAXTON. Thank you. Would anyone else care to comment?

Mr. PERCIASEPE. Well, basically I agree with Bill. There are a number of models that we can look at, that I think we can learn from, including the ones in New Jersey. We have a process going on now in Maryland where we are working with the National Park Service, in the bay area, in general, with the National Park Service to look at sensitive areas, and areas along the bay for public access, and that is another example of Federal-State, and then, eventually, local responsibility.

In the sensitive areas, public access is an important part of the land-use equation in coastal areas.

Mr. SAXTON. Thank you. Ms. Hanmer.

Ms. HANMER. I was just going to say, at the Federal level, I am not sure we do a very good job when we get into the details. When I go around the country talking with people, what I generally hear is that in land-use management, at the local level, environmental concerns are more or less irrelevant. Certainly natural environmental concerns as opposed to neighborhood integrity or some of the social issues.

And I think that what we need is a clear set of principles that guides State and local land-use planning, that says that environmental protection is a central element of what those programs are being implemented for.

I do not think you necessarily need the Federal agencies making the decisions or getting into the details.

Mr. SAXTON. Thank you. If I can just change the subject for a moment. I alluded in my opening statement to an amendment that I may wish to offer to the bill.

It has to do with the water quality standards related to section 403. This bill seems to limit, at least in my view, the upgraded water quality standards to those areas that are designated in the National Estuary Program.

My thinking is that that is fine, as far as it goes, but would it be advisable? Is it practical to extend those same water quality standards to all estuarine areas in the coastal United States?

Ms. HANMER. We have looked at 403(c) and are presently preparing a report to Congress in response to the 1987 Clean Water Act amendments. We will be coming forward, very shortly, with that report. What it basically does is take a look at how 403(c) has worked already, to see what difference it has made. I think that there are some principles that we need to look at very seriously, certainly for the kinds of sensitive areas that are mentioned in this legislation, perhaps also for all new and increased dischargers, those that would be covered by our present anti-degradation policies.

However, I am not sure that we have gotten the techniques right yet. Using biological assessment to make decisions has a lot of limitations in different kinds of areas, so I think we want to be careful about the mix of tools we use to enhance the stringency with which we look at new and increased discharges to the coastal zone. We are not going to get there from here, if we keep doing business as we have been doing it.

Mr. SAXTON. Well, I guess the question is: How do we get there, and how fast can we move? Do we phase this process in over a period of time? Do we start with those estuarine areas that are in the National Estuary Program? Or is there some better way to proceed?

Ms. HANMER. My suggestion would be that we focus on the special estuaries, some definition of "specialness" such as is in this legislation, and also to new and increased discharges, and not on the renewal of the thousands of discharges that are already going on. We have to renew those permits every 5 years. If I had to set a priority, it would be on new and increased discharges, and discharges to particularly sensitive areas.

Mr. SAXTON. Thank you.

Mr. STUDDS. The gentleman from New Jersey. Mr. Hughes.

Mr. HUGHES. Thank you very much, Mr. Chairman. Mr. Chairman, I have a statement that I would like to put in the record.

Mr. STUDDS. Without objection, so ordered.

[The statement of Mr. Hughes follows.]

STATEMENT OF HON. WILLIAM J. HUGHES, A U.S. REPRESENTATIVE FROM NEW JERSEY

I would like to thank both Chairman Studds and Chairman Hertel for holding today's hearing on H.R. 2647, The Coastal Defense Initiative of 1989.

For over a century, we have used the ocean as a repository for our waste. Few have objected as we have dumped our ship garbage, sewage sludge, industrial waste, and a host of other materials into the back bays, nearshore waters, and open ocean.

During the last Congress, much attention was focused on the problems of plastic pollution, ocean dumping, and medical waste washing up on our beaches. Congress was very successful in passing legislation to implement Annex V of the MARPOL agreement, place a ban on ocean dumping, and establish a tracking system to prevent illegal dumping of medical waste.

During this Congress, we are expanding our efforts to address coastal pollution that results from point source and non-point source pollution. A countless number of pipes currently discharge waste into our marine environment—and an even greater amount of urban and agricultural runoff makes its way into our coastal waters each year.

It is clear we need a comprehensive strategy in place to effectively deal with these marine disposal activities.

The legislation we are considering today will strengthen our laws to address these problems and safeguard our marine environment from pollution.

It provides for a five-point plan consisting of stronger national standards, better monitoring programs, stricter enforcement, efforts to control marine pollution from land-based sources, and an increase in funding for state and local programs.

The key to this legislation is its call for a Federal-State-Local partnership in implementing coastal protection programs. The support and commitment of all levels of government is necessary to ensure adequate protection of our coastal environment.

As one of the original sponsors of The Coastal Defense Initiative, I look forward to hearing the comments from today's witnesses and, if necessary, to working with my colleagues in perfecting this legislation to achieve and maintain coastal environmental quality at its highest level.

Mr. HUGHES. I, too, want to echo the sentiments of my colleagues by welcoming the panel, and thank you for your testimony. I have just a couple of questions.

First, it seems to me that the centerpiece of any initiative such as H.R. 2647 has to be the coastal zone management aspect. Do you all agree to that? And if anything, we should be looking at ways to strengthen our Coastal Zone Management Program, including the Federal law.

Mr. BURTON. Mr. Hughes, I would just respond and say that I agree that the CZM Program has got to be recognized as a key element of the bill. Indeed, in the content of the same issue I raised a few moments ago—land-use planning as a possible yellow flag—to the extent the Committee continues to proceed—and I am not necessarily discouraging it at all—I think we need to look at the experience that we have had under the CZM Program, which I believe has been successful in causing States to consider the sorts of land-use issues that need to be considered in this area.

Indeed, issues of beach access, recreation, protection—all those have been required to be considered in the context of approved Coastal Zone Management Programs. So the notion that we should recognize that statute that is in place, and try and improve on it, I think is correct.

Mr. HUGHES. Well, the reason I ask is because in the last few years we seem to have seen a retreat by the Federal Government in a leadership role, and we seem to find that the Coastal Zone Management Program is proposed for phase-out. While we have had some successes in the last few years, we still need to strengthen the program to encourage the States to deal with a myriad of problems along the coast. And, we continue to wrestle with the problem that Mr. Saxton alluded to, that is, the difficulties local land-use planners to often face in dealing with a myriad of environmental concerns. It has been a tough issue, and yet coastal zone management is one vehicle that we have at our disposal to encourage States to look at problems such as the over-population of our coastal areas; the need to do a far better job of regulating those who discharge in coastal waters. Isn't that going to require a Federal role, or leadership at the Federal level in the years ahead?

Mr. BURTON. Well, as the Congressman, and certainly the rest of the Committee know, the record between Congress and the Administration with regard to the funding of 306 grants under coastal zone management has been one that is easy to read. We have not been against a reauthorization of the Coastal Zone Management Act per se. Indeed, the law is an important vehicle for causing the

sorts of things, considerations to be made that I addressed a moment ago, and certainly the consistency provisions of the Act, et cetera, all are provisions that need not 306 funding in order to be effective.

However, we have not been in support of reauthorizations for 306(a). Our position and belief has been that over the years that the Coastal Zone Management Act has been in place, over $300 million have been appropriated, so that Coastal Zone Management Programs could be started up in the various States—29 now—that have those programs. But to the extent that such funds are perceived as necessary for the continuation of programs of a State and local nature, they should be funded by State and local entities.

I am speaking on behalf of a position that was adopted, and has been in place on behalf of the Reagan Administration. There has yet to be a position taken on the part of the Bush Administration for reauthorization of Coastal Zone Management Programs.

Mr. HUGHES. Well, I understand what you are saying, but it does not make sense to me. We have not solved the problem. We expect that by the year 1990, about 120-million Americans will live within 50 miles of our coast. So, if anything, the problem should become more acute. While many of the programs are certainly in place, we have not solved the problems, and the States need a Federal role, Federal leadership, and Federal support.

Let me move on to another area. One of the features in this particular bill that I find attractive, is the funding. I think we all agree that there has got to be some funding component. I realize it is tough, in these fiscal times, to talk about funding, but let me ask you how you feel, generally, about levying a fee on those that discharge into our coastal waters, as a way of providing the funding necessary to do good planning and provide Federal leadership? This Administration and the previous Administration have been very supportive of user fees as such.

How do you generally feel about using those that are presently discharging as one of the repositories of financing the necessary initiatives to clean up these areas?

Mr. EICHBAUM. I could perhaps address some elements of that. I think that it is clear that we will need to have such fees for dischargers as a source of support for these programs. Ms. Hanmer raised earlier what is the theory of the fee, and there are sort of two different theories. One is the worse the pollutant the higher the fee. The other is you charge for the amount of work that Government has to do to manage that particular source.

I tend to come down on the side of the latter approach. It should not be a tax to pollute, or a tax which is designed to reduce pollution. It ought to be a fee that is charged for the fact that Government has to do a certain amount of work because this discharge, even though legal and non-polluting, because it is within the parameters, is occurring.

There is a fairly significant risk in some of this. We ran into it several years ago in Maryland, where we had a fee on hazardous waste facilities in the State, which generated a very nice pot of money to help the hazardous waste program, and as all of those facilities got closed down, we lost the fee and we lost the fund, so we had to look for other sources.

So there are these kinds of problems, but in this day and age, there is no question but we are going to have to charge fees.

Mr. HUGHES. Let me ask Mr. Burton to comment.

Mr. BURTON. You noted earlier the value with which the Administration has placed the notion of user fees. I think this falls under that category. Further, the philosophy of "the polluter pays" I think is a valuable one, and to the extent we have programs in place that require significant new funding, some sort of a system like that I think is something that we could consider valuable.

Mr. HUGHES. Ms. Hanmer, how do you feel about it?

Ms. HANMER. I feel exactly the same. I think it is inevitable that we have to look at some kind of fee system. We expressed some reservations in our testimony about the particular way this was set up, and the equity between discharges to inland waters and coastal waters, but I think those are things that can be worked out.

Mr. HUGHES. Just one final question. I believe that Mr. Perciasepe——

Mr. PERCIASEPE. Good enough.

Mr. HUGHES. I think you testified, either you or Mr. Eichbaum, about the data base on the Chesapeake, and that there is a pretty good data base. How would you characterize the data base, for instance, in the lower Delaware Bay, and along the East Coast?

Mr. PERCIASEPE. Well, my experience is more with the bay than the Delaware Bay, although I do have a little bit of—the Chesapeake Bay as opposed to the Delaware Bay—but the reason that the data base is in pretty good shape in the Chesapeake Bay is because of the Federal incentive funds that have been available to mount a monitoring program.

Mr. HUGHES. What I am trying to find out is what our data base is like and whether——

Mr. PERCIASEPE. I think that it is going to be very spotty and not—and probably most key on the data base, is not temporally consistent. In other words, there will be a study done and an analysis done, and then there will be gaps of years, and then there will be another study done.

Whereas, you really do need to have a consistent, and I also agree with Bill Eichbaum, earlier, who said, you know, the monitoring and data bases probably need to be more intense in certain areas of more critical concern, and then there needs to be a baseline, you know, in the other areas.

Mr. HUGHES. Well, that is my perception, too. Ms. Hanmer?

Ms. HANMER. Just as a comparison, we spent about $27 million through EPA's ORD research program to set up the information that we needed for the Chesapeake Bay agreement. Nothing like that has been done for Delaware Bay. So setting up the information that you need for management of coastal waters is an expensive proposition.

Mr. HUGHES. Mr. Burton?

Mr. BURTON. I would just note that I think we have got a beginning of a good data base in place because of our status and trends work that we have done in that area. It is not as complete as it could be, because of some of the special problems, but I think we are getting there. It could be improved.

Mr. HUGHES. Well, Mr. Burton, it is not only not as good as it should be, but it is terrible. Let's face it. We are talking about attempting to develop a strategy to deal with major problems along our coast, and some of our rivers and estuaries, and yet we do not even have good baseline data to measure against. And even today, we are not securing the funding necessary to begin studies. In your most recent budget submission, there are major cuts in the area that would deny us the accurate information to make a determination as to what has happened, and to intelligent decisions as policymakers.

Mr. BURTON. Let me just suggest, Mr. Hughes, that—you speak of the most recent budget submission. We have identified about $20 million worth of requests that I think are directly relevant to the issues we are talking about here, that would have relevance in the Delaware Bay, not the least of which was a full funding request for Status and Trends, and in addition to that, ocean observations, a funding request of about $5 million, and another 12-plus million dollars for a new Coastal Ocean Program which would further enhance the Status and Trends Program intended to collect the sort of data we are describing here.

I think we are making——

Mr. HUGHES. Well, I know my time is up. I am familiar with one program that NOAA is attempting to re-program, and it is the only program on the East Coast that is looking at the 106-mile site where we are dumping sewage sludge, and where we have had major problems. As a Member of Congress, I am concerned about it. It seems to me that that is awfully short-sighted, particularly when we know we are dumping hundreds of thousands of tons of sewage sludge in the ocean. Yet we are not making an effort to find out just exactly what is happening. We need to re-think priorities in this whole area of obtaining baseline information and monitoring capabilities. I do not know how we can make intelligent decisions unless we have that data. Thank you, Mr. Chairman.

Mr. STUDDS. The gentleman from Florida.

Mr. Goss. Thank you, Mr. Chairman. I apologize for being late. I have a statement I would like to submit for the record, also, if I may. Thank you.

Mr. STUDDS. Without objection, so ordered.

[The statement of Mr. Goss follows.]

STATEMENT OF HON. PORTER J. GOSS, A U.S. REPRESENTATIVE FROM FLORIDA

Mr. Chairman, thank you for holding this hearing today, and congratulations on the introduction of this much-needed bill. Like our colleagues from coastal states around the Nation, we in Florida have watched with distress as the quality of our once pristine marine environment has deteriorated subtly but steadily over the past decades. Clearly, a bold solution is needed, and your Coastal Defense Initiative is an excellent starting point in confronting this serious situation.

Including all levels of government in implementation of a Coastal Defense Initiative is vital, and this bill's emphasis on such cooperation deserves commendation. However, we should be careful that in our attempt to forge a cooperative working relationship with coastal states and communities, we in Congress do not merely end up dictating one "solution" on areas with widely different concerns, problems, and options. Such a tack would provide disincentives to local cooperation, cooperation which is key to this initiative's ultimate success.

In Congress, we have already adopted several pieces of legislation, such as the Coastal Zone Management Act and the National Estuary Program, that have succeeded precisely because they provide the right mixture of national vision and local

freedom to innovate. States and communities will respond responsibly and vigorously if we make them full partners, and do not establish too many preconditions to this cooperation.

Of course, there also remains the issue of just how much funding will be needed to ensure ultimate realization of our goal: To clean the Nation's coastal waters. Included in this issue is the question of whether this plan would require states and communities to focus on exhorbitantly expensive retrofit measures, or instead ask them to focus on responsibly managing new growth.

As you have noted, Mr. Chairman, this is an enormously complex problem, and I thank you for your excellent proposal to reach this common goal. I look forward to hearing from our witnesses today, and learning of the opinions of local officials in future hearings.

Mr. Goss. Perhaps one of the reasons we have not had much controversy here, this morning, on the legislation is that I gather we have not had any elected local Government officials or State Government officials who are elected, and I suspect that you are right—we will have the controversy, as well as them, present.

I come very much here, to Washington, from that immediate milieu, and I can assure you that when I see things in a proposed piece of legislation that says, "Federal encouragement for the local Government," that the red flags go up, and I think that most of my questions are probably going to reflect on Mr. Eichbaum's remarks about the relationship between growth and home rule, and how this is going to be received out there in the field.

I think this is an amazingly critical piece of legislation, I totally support it, but I think we have got a lot of work to do, to make sure that we have all the partners aboard as we try and accomplish the objectives that are set out here.

The line of my questioning I think would go this way. Do you feel that there are enough incentives in the legislation that we are considering now, for State and local Government, given the advantages, the "carrots and the sticks" that are presently out there under the Coastal Management Act, and the other programs, and Federal assistance that is available, and the "sticks" that are used for noncompliance in some cases, to enlist the aid, the happy aid, cooperation of the coastal States and the coastal communities, when we are talking about giving them model ordinances that are going to, for instance, talk about density and buffer strips, and setbacks, and knowing what incredible "red flags" those are.

Can you think of other incentives that are going to help us make our case to get the job done, and bring those people aboard? I will start with Ms. Hanmer.

Ms. HANMER. One of the issues that I raised in my statement was the need for flexibility. One of the bigger things that we have been able to do with the National Estuary Program is to give the opportunity to the local officials to participate in the process as well as local environmental community and scientific people.

So that you bring people along, in terms of understanding what the problems are and what the real issues are, and then that builds a base for understanding what the needed remedies need to be, and somehow, that process I think needs to be incorporated.

Mr. Goss. You made the comment that environmental concerns are less relevant, and I agree that in some communities they are. But I think, increasingly, there has been an awareness of the need. Certainly weekends like the one we have just had help, dramatical-

ly, unfortunately. But I think the issue is dollars more than desire. The problem of how you go back—and perhaps we should be talking about it, and I would ask you to consider this.

Should we be distinguishing between retrofit measures, which are very expensive, and often get to the problem, or future growth such as Mr. Eichbaum indicated? That is another aspect of this, when we are talking about incentives, and splitting that up and making those distinctions. I agree with your observations about how you are doing the NEP. I think that is right.

Ms. HANMER. This is a very complex area because, in some areas, for example, where you have got enormous degradation from combined sewer overflows, a very appropriate local investment is going to need to be dealing with that, and that will be an extremely expensive investment.

In general, however, I am concerned in most of our environmental programs, that we spend too little attention and dollars on prevention, get ahead of the problem, we tend to exhaust most of our energy and dollars in dealing with problems we already have. It differs from area to area, but, in general, I would say more emphasis on prevention.

Mr. Goss. Thank you. Mr. Burton.

Mr. BURTON. I think you have hit on a key area here. It is vital that, not only in the present Coastal Zone Management Program in which funds are being distributed to the 29 State programs, as well as the contemplated legislation before us which, of course, contemplates the dispersion of much more money—we need to establish the importance of accountability, which is I guess what you are getting at here.

And mechanisms to make sure the States are accounting for their expenditures in the name of pollution need to be established. The concern I have got—at least in one portion of the bill, and again, I do not know all the details as well as I should, or will later—that the "carrot and stick", as you characterized it, I think could be amended a little bit.

I note in the one area, that if a State is not delivering up an adequate program, all fundings from the new fund of money would be denied. As is the case now, we have got the ability under the Coastal Zone Management Act to similarly deny funds.

I think we need to have something in between. All or nothing is difficult to implement, and it has been very difficult from a political standpoint, and when a finding has been made that a particular Coastal Zone Management Program, for example, is not in compliance with their own program goals, it has been difficult to deny that funding for political reasons.

If we had some intermediate measure, short of all or nothing, I think it would be more helpful, and so working with the Committee to establish a more effective "carrot and stick" I think is important. We can work on some ideas with you.

Mr. Goss. Thank you. While I still have time, Mr. Perciasepe, if you would respond.

Mr. PERCIASEPE. Yes. How to provide, you know, something more than just the incentives, or are there enough incentives in the bill to promote the local Government involvement in the land-use planning—I think that was your question, if I want to go back to it.

Let me just reflect a little bit, again, on a Maryland experience in a little more detail, and that is the Critical Area Program, where we actually implemented a land-use control program on coastal waters in the Chesapeake Bay.

The way that program was set up is it created a commission, not necessarily a bureaucracy, so to speak—a commission of a mix of citizens and elected officials that were appointed by the Governor to a larger panel that was charged with developing the criteria. How they are going to achieve the goals of the bill.

This group was functionally and geographically representative of the State, and it was in the workings of that group—and I think Bill was a member of that group when it first started—that some of these local-State kinds of issues were banged out, and believe me, they are never completely banged out.

But they came up with criteria, they came up with a process that had deadlines in it—so many days you must do this, so many days you must do that—and on top of that was the usual kinds of incentives, the financial assistance to the local Governments to provide the plans.

Based on that kind of an involvement approach, coupled with pretty good public education and public involvement, to date, there are about 66 local Governments in Maryland that had to come up with these plans and implement them with enacted ordinances. All but about five, now, have been completed.

So there is something to look at there, and, you know, every State is not the same, and I really recognize that, but there are potentials to make these things a little more incentive-oriented. But, you know, it is not an easy thing.

Mr. Goss. Mr. Eichbaum?

Mr. EICHBAUM. Well, I basically agree with what the other panelists have said. I think the problem of assistance, as you suggest, is an important thing. It has to be provided to local Governments. That you hear, time and time again, at the State level—local governments say, give us information, help us make these decisions, provide us with the tools, those kinds of things. I agree with you that that is an important role.

I think, secondly, that probably again—as Mr. Burton suggested—the "all or nothing" on the funding is—that is probably too draconian. It was hard to make work in the Clean Air Act with respect to auto emission controls, for example, but it was very effective at the bottom line, but perhaps something more "scalpel-like" would be both more acceptable and more effective.

I think, though, as I said to the Congressman from New Jersey, that the critical question is the one that Bob has raised. If this is going to be made to work, there has got to be a mechanism to allow those local and State political interests to participate in the design and management of the program. There are not many models for that in the Federal system, so it is going to take some real innovation to determine it, but I think if we could do it, that would be the crucial step.

Mr. Goss. Thank you very much, Mr. Chairman.

Mr. STUDDS. I thank the gentleman. I regret the shortness of time. I am going to recognize the other gentleman from New Jersey. Let me just say, I am sorry about the timing. We have our

usual, first of the day, waste of all of our time, the general vote at the moment. It is going to be impossible to reconvene the Committee after that vote, so the gentleman will have until the second bells.

I would just also thank the members of the panel. We will be leaving here with unseemly haste at the conclusion of Mr. Pallone's questions. We look forward to working very, very seriously and diligently with all of you in the weeks and months ahead.

It is our intention to enact legislation as comprehensive and effective as possible, and each of you plays an absolutely critical role in that and we appreciate your help.

The gentleman from New Jersey. Mr. Pallone.

Mr. PALLONE. Thank you, Mr. Chairman. I will be brief. I just wanted to say, following up on what the gentleman from Florida said, that a key aspect of this legislation is, if you will, to sell it back in the district to the constituents.

I just wanted to report, that over the weekend, I did a little bit of selling to environmental groups in my district, trying to go around and explain to them the details of what the CDI initiative amounted to, and the reaction was very good.

Mr. STUDDS. Was that more support than the SDI?

Mr. PALLONE. Absolutely more support than SDI. In fact someone mentioned the comparison and thought that was a good analogy, or that the name was good.

But, in particular, the support I think was based on some of the things that I heard in the latter part of the hearing here, and that is the increased enforcement, the national monitoring that has been proposed, the "polluter pay" concept, and also the fact that we are trying to deal, in some way, with land-use controls or regulations, or encourage that on a Federal level.

I just wanted to ask one question, because I do not have a lot of time. But I wanted to ask one question of Ms. Hanmer. I was a little concerned when I read, at the end of your statement—I did not hear your oral testimony—but in the written statement, it says, "We are concerned that some of the draft legislation proposes changes that are not needed and may even be wrong. For example, the Clean Water Act correctly places a responsibility for water quality on the States." And then suggests that, "national lists of degraded or threatened waters developed by the Federal Government, we believe will have little effect on the States' willingness or ability to do anything about the problem."

I have always felt that the reason why States, in many cases, have moved ahead, and done things on their own is because the Federal Government has lagged behind, and the fact that we have witnessed States going further in terms of pollution control or more strict standards, in part, in my opinion, is because there really has not been an aggressive Federal effort in that regard.

So my feeling would be that there is an important Federal role here, and that one of the reasons why environmental groups in my part of New Jersey have been supportive of this is because they would like to see a greater Federal role.

So I am a little concerned about why you feel that that is not necessary. In particular, I see you mention that this is particularly true for contaminated sediments, and contaminated sediments, I

have to tell you, is one of the concerns that we have, where the Federal Government has not done enough, particularly off the coast of New Jersey with the mud dump site, the dredge spoil site that is six miles offshore.

The feeling is, not only on my part, but environmental groups' part, that those standards that are set for contaminated dredge materials are not adequate.

That would be an example where I think there is a need for a greater Federal role and more strict standards. It kind of goes the opposite of what you are suggesting. I just wanted your comments on that.

Ms. HANMER. Well, we were not suggesting something quite as fundamental as that. Regarding this bill, to have us provide national standards is what we were really saying we thought was counterproductive.

The way the Water Quality Act has been working—and I think working effectively—is for EPA to publish information on what we think the problems were, and for us to put out criteria, but to work in a more interactive way with the States.

We just finished a pretty successful experience on that, under 304(l) of the Water Quality Act. The harassment and delay we would have gotten into trying to set national standards, not not have been worth it.

We have an experience right now where States are setting hundreds of toxic water quality standards because they are using our criteria and they are using our guidance, and our sense of priorities, but they are using their administrative mechanisms to set the standards. I just think it is a much faster mechanism.

Mr. PALLONE. See, I would just think—I know we are running out of time—that the type of national list for degraded or threatened waters, that are being suggested here, could not help but be helpful in some way. In other words, it may be that some States are going further, but for the Federal Government to at least establish a list and decide, you know, what needs to be prioritized, to me, is something that needs to be done, but obviously we will get into this some more. Thank you. Thank you, Mr. Chairman.

Mr. STUDDS. I thank the gentleman. The Chair recognizes the existence of the gentleman from—the presence of the gentleman from California, and his existence, and regrets that there will not be time. Does the gentleman have a two-second statement or question?

Mr. HERGER. I do not.

Mr. STUDDS. I am sorry about the timing. Those are the second bells. We are going to have to adjourn. Again, we thank the panel, and we will be working with you in the months to come. Thank you.

[Whereupon, at 12:11 p.m., the Subcommittee was adjourned, subject to the call of the Chair.]

I

101ST CONGRESS
1ST SESSION

H. R. 2647

To provide for the protection and preservation of coastal and Great Lakes environmental quality for present and future generations.

IN THE HOUSE OF REPRESENTATIVES

JUNE 14, 1989

Mr. STUDDS (for himself, Mr. HUGHES, Mr. PALLONE, Mr. BENNETT, Mrs. UNSOELD, Mr. SAXTON, and Ms. SCHNEIDER) introduced the following bill; which was referred jointly to the Committees on Merchant Marine and Fisheries and Public Works and Transportation

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A BILL

To provide for the protection and preservation of coastal and Great Lakes environmental quality for present and future generations.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—GENERAL PROVISIONS

SEC. 101. SHORT TITLE.

This Act may be cited as the "Coastal Defense Initiative of 1989".

SEC. 102. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds the following:

(1) Coastal waters, including the waters of the Great Lakes, are facing increasing threats to their long-term health and integrity through the concentration of growth and development in the coastal and Great Lakes regions of the United States.

(2) Special efforts must be made by all levels of government to achieve, maintain, and protect these areas through strengthened standards and enforcement, through improved monitoring and local planning, and through increased, predictable funding for these efforts.

(b) PURPOSE.—The purpose of this Act is to forge a common commitment among Federal, State, and local programs to protect and preserve coastal and Great Lakes environmental quality for present and future generations of Americans.

SEC. 103. DEFINITIONS.

In this Act—

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) APPLICABLE WATER QUALITY STANDARDS.—The term "applicable water quality standards" means those standards adopted by a State and approved by the Administrator or promulgated by the Administrator

under section 303 of the Clean Water Act (33 U.S.C. 1313).

(3) APPROVED COASTAL ZONE MANAGEMENT PROGRAM.—The term "approved coastal zone management program" means State coastal zone management program approved by the Under Secretary pursuant to section 306 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1455).

(4) CERTIFIED ENVIRONMENTAL AUDITOR.—The term "certified environmental auditor" means an auditor who meets applicable industry standards for the conduct of environmental audits and is on a list of auditors approved by the Administrator or by a State with an approved auditing program.

(5) COASTAL DISCHARGERS.—The term "coastal discharger" means those direct and indirect point source dischargers into coastal waters that may be subject to the coastal effluent charge system established by section 606 of this Act, and includes—

(A) all point sources that discharge pollutants into coastal waters except publicly owned treatment works; and

(B) all significant industrial users of publicly owned treatment works that discharge pollutants into coastal waters.

(6) COASTAL ENVIRONMENTAL MONITORING.—The term "coastal environmental monitoring" means a continuing program of measurement, analysis, and synthesis to identify, quantify, and predict environmental conditions and trends for the purpose of establishing a technical basis for decisionmaking.

(7) COASTAL WATERS.—The term "coastal waters" means—

(A) the waters of the Great Lakes under the jurisdiction of the United States, including their connecting waters, harbors, bays, wetlands, and marshes;

(B) those portions of rivers, streams, and other bodies of water having unimpaired natural connection with the open sea up to the historic head of tidal influence, including salt wetlands, coastal and intertidal areas, bays, harbors, and lagoons; and

(C) waters of the territorial sea and the exclusive economic zone of the United States.

(8) COASTAL ZONE.—The term "coastal zone" has the meaning that term has in section 304(l) of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453(l)).

(9) DISCHARGE OF POLLUTANTS.—The terms "discharge of pollutants" and "discharges of a pollutant" have the meanings those terms have in section 502(12) of the Clean Water Act (33 U.S.C. 1362(12)).

(10) ENVIRONMENTAL AUDIT.—The term "environmental audit" means a systematic, documented, periodic, and objective review of facility operations and practices which are undertaken by an internal or independent auditor for the purpose of—

(A) evaluating compliance with environmental laws, regulations, or permit requirements; and

(B) evaluating the practices and procedures established by the facility owner or operator to ensure continuing compliance with applicable discharge requirements.

(11) MAJOR DISCHARGER.—The term "major discharger" means an industrial facility that discharges pollutants into coastal waters which is determined by the Administrator to constitute a major discharger based upon—

(A) the toxicity of the discharger;

(B) the flow-volume of the discharge;

(C) the presence of traditional pollutants in the discharge;

(D) the projected impacts of the discharge on receiving waters; and

(E) such other factors the Administrator deems important.

(12) MINOR DISCHARGER.—The term "minor discharger" means any industrial facility which discharges into coastal waters that is not a major discharger.

(13) COASTAL DEFENSE FUND.—The term "Coastal Defense Fund" means the fund established by section 602.

(14) SIGNIFICANT NONCOMPLIANCE.—The term "significant noncompliance" means severe or chronic violations of effluent limitations or other discharge requirements of the Clean Water Act that indicate a need for formal enforcement action by the Administrator.

(15) STATE PERMITTING AUTHORITY.—The term "State permitting authority" refers to the duly authorized State official administering a State permit program for discharges into navigable waters approved by the Administrator under section 402 of the Clean Water Act.

(16) SUBSTANTIAL AND CONTINUING NONCOMPLIANCE.—The term "substantial and continuing noncompliance" means the ongoing, severe, or chronic vio-

lations of marine water quality standards or the ongoing, chronic failure of coastal waters to achieve their designated uses, as determined by the Administrator under section 503.

(17) TASK FORCE.—The term "Task Force" means the National Coastal Environmental Task Force established under section 402.

(18) UNDER SECRETARY.—The term "Under Secretary" means the Under Secretary for Oceans and Atmosphere of the Department of Commerce.

(19) CLEAN WATER ACT.—The term "Clean Water Act" means the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.).

(20) NATIONAL MARINE WATER QUALITY CRITERIA.—The term "national marine water quality criteria" means the numeric criteria required under section 202.

(21) SIGNIFICANT INDUSTRIAL USER.—The term "significant industrial user" means any nondomestic source of pollutants introduced into publicly owned treatment works discharging into coastal waters that the Administrator determines are—

(A) subject to the categorical pretreatment standards under section 307(b) of the Clean Water Act; or

(B) noncategorical sources that have a reasonable potential to adversely affect the operation of a publicly owned treatment works.

TITLE II—COASTAL WATER QUALITY

SEC. 201. FINDINGS.

The Congress finds the following:

(1) Federal and State efforts to develop and implement marine water quality criteria have lagged behind the development of inland water quality criteria.

(2) Marine and estuarine environments present special challenges for the development and implementation of effective marine water quality criteria.

(3) Preserving and restoring marine and estuarine water quality depends upon improving the ability of Federal and State programs to establish and implement reliable standards for pollutants in marine and estuarine environments that will protect human health and indigenous populations of fish, shellfish, wildlife, and their habitats.

(4) Strengthened marine water quality programs will improve the ability of the Federal, State, and local authorities to reduce coastal pollution fairly and effectively.

SEC. 202. NATIONAL MARINE WATER QUALITY CRITERIA.

(a) PROMULGATION.—

(1) IN GENERAL.—Not later than eighteen months after the date of the enactment of this Act and after notice and comment, the Administrator shall promulgate numeric marine water quality criteria applicable to State water quality standards for those pollutants for which information developed by the Environmental Protection Agency has been published under section 304(a) of the Clean Water Act. Such criteria shall ensure the protection of public health and the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife and their habitat and shall provide for recreation in and on coastal waters.

(2) ADDITIONAL CRITERIA.—In addition to the requirements of paragraph (1), the Administrator shall from time to time and after notice and public comment promulgate such additional national numeric marine water quality criteria as may be necessary for those pollutants which, individually or cumulatively, may contribute to the degradation of coastal water quality. Such criteria shall ensure the protection of public health and the protection and propagation of a balanced, indigenous population of fish, shellfish and wildlife and their habitat and shall provide for recreation in and on coastal water.

(b) STATE STANDARDS.—Any marine water quality criteria that is adopted by a State for a pollutant pursuant to section 303 of the Clean Water Act that is more protective of human health or the environment than the national marine water quality criteria adopted by the Administrator under subsection (a) shall take precedence over that national criteria.

(c) PETITIONS.—

(1) STATE PETITIONS FOR LESS STRINGENT CRITERIA.—(A) The Governor of a coastal State may petition the Administrator to establish a less stringent numerical marine water quality criteria for a pollutant than the national criteria promulgated pursuant to this section. The petition shall present evidence that the less stringent numerical criteria will achieve the designated uses of the water body and is justified because of the physical, chemical, or biological characteristic of the coastal waters to which it would apply.

(B) The Administrator shall publish notice of a petition under this paragraph when it is received and a schedule governing the Administration's response to it. The Administrator shall also provide the public with an opportunity to review and comment on each such petition.

(C) Not later than nine months after receiving a State petition under this paragraph, the Administrator shall grant the petition if the Administrator finds that less stringent criteria proposed in the petition will achieve the same level of protection as intended by the national criteria.

(2) OTHER PETITIONS.—(A) Any person may petition the Administrator to develop and promulgate national marine water quality criteria for any pollutant for which criteria have not been promulgated under subsection (a).

(B) The Administrator shall grant a petition under this section if the Administrator finds, after notice and public comment, that the promulgation of the criteria is necessary to meet the objectives of subsection (a)(2).

(d) ADDITIONAL INFORMATION.—The Administrator shall develop and publish criteria and information under this section and section 304 of the Clean Water Act on—

(1) sediment quality for coastal waters;

(2) marine and estuarine biological integrity; and

(3) such other indices that the Administrator determines will provide a reliable complement to the pollutant-specific criteria and information published under this section and section 304 of the Clean Water Act.

SEC. 203. COASTAL WATER QUALITY IMPLEMENTATION.

(a) IDENTIFICATION.—Not later than one year after the promulgation of national marine water quality criteria under section 202 and every three years thereafter, the Governor of each coastal State shall identify—

(1) those coastal waters for which applicable water quality standards cannot reasonably be anticipated to be achieved or maintained; and

(2) those coastal waters which are currently achieving their water quality standards but which are threatened by reasonably foreseeable increases in pollution loadings from new or expanding point sources or nonpoint sources, including from residential or industrial development in coastal areas.

(b) CONTROL STRATEGIES.—The Governor of each coastal State, acting through its State water pollution control authority and in close consultation with its State coastal zone management authority for the purposes of utilizing the authorities of section 306B of the Coastal Zone Management Act, shall develop individual control strategies consistent with the requirements of section 303 of the Clean Water Act for those coastal waters identified under subsection (a). Each control strategy shall—

(1) identify the principal sources of pollutants from point and nonpoint sources into those coastal waters, utilizing information developed under sections 304(d),

304(l), 305(b), and 319 of the Clean Water Act, and section 306B(b)(1) of the Coastal Zone Management Act;

(2) establish the total maximum daily load of those pollutants that the Administrator determines contribute to the failure of those waters to achieve or maintain their water quality standards, providing for seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship among point source discharges, nonpoint sources and water quality in accordance with the requirements of section 303(d) of the Clean Water Act;

(3) allocate among the sources identified under paragraph (1) the necessary reductions in pollution loadings to achieve and maintain applicable marine water quality standards for those waters through the use of wasteload allocations for the point sources and load allocations for nonpoint sources;

(4) provide an implementation schedule for achieving those load reductions as soon as practicable but in no case later than five years after approval of the control strategy through—

(A) the use of water quality based effluent limitations under section 302 of the Clean Water Act;

(B) the development and implementation of best management practices for control of nonpoint sources; and

(C) the development and implementation of restoration plans under section 306B(d) of the Coastal Zone Management Act; and

(5) provide for a system for allocating and exchanging discharge credits and pollution offsets which—

(A) promotes an efficient pollution reduction program among all sources of pollutants in those coastal waters;

(B) requires that increases in point source loadings secured through the use of such an exchange with nonpoint sources shall be offset by at least a twofold reduction in loadings from that nonpoint source in the general area where the increase occurs; and

(C) ensures that no net increases in pollution loading will occur as a result of the use of such a system.

(c) APPROVALS.—Not later than one year after identifying coastal areas under subsection (a) and every three years thereafter, a Governor shall submit to the Administrator for approval a control strategy developed pursuant to this sec-

tion. The Administrator shall approve the control strategy if the Administrator finds, not later than six months after receiving the strategy, that it will meet the requirements of subsection (b).

(d) CERTIFICATION.—Upon approval of a control strategy of a State under this section, the Governor of the State shall with respect to each source of pollutants into coastal waters that are subject to the control strategy—

(1) acting through the State water pollution control agency for purposes of reviewing existing and new point sources, review each proposed new permit, and each renewal of an existing permit; and

(2) acting through the State coastal zone management agency or purposes of reviewing land use activities in the coastal zone, review each activity identified pursuant to section 306B(b)(2) of the Coastal Zone Management Act to determine if such proposed permit or activity meets the requirements of the strategy. The Governor, acting through the appropriate State authority, shall certify in writing that the proposed permit, renewal or activity complies and is fully consistent with the requirements of the control strategy. No permit or activity described in subsection (d)(1) or (2) may proceed without such certification.

(e) RESERVATION.—Nothing in this section shall affect the requirements or schedules established by section 301, 303, or 304 of the Clean Water Act.

SEC. 204. OUTSTANDING COASTAL RESOURCE WATERS.

(a) DESIGNATION.—Not later than two years after the date of the enactment of this Act and after notice and public comment, the Governor of each coastal State or the Administrator shall designate outstanding resource waters those coastal waters lying wholly or partially within the State with particular ecological, recreational, or esthetic value, taking into account their fisheries and shellfish resources, their habitat, and their recreational uses. Such coastal waters may include, at a minimum, those coastal waters in or adjacent to—

(1) elements of the national park system;

(2) national wildlife refuges;

(3) national marine sanctuaries; and

(4) State parks, recreational areas, and wildlife preserves of particular ecological significance.

(b) PETITIONS AND APPEALS.—

(1) OPPORTUNITY TO PETITION.—Prior to designating waters pursuant to this section, a Governor shall provide an opportunity for local officials and the public to petition for a designation under this section.

(2) APPEAL OF PETITIONS.—(A) In the event that a Governor denies a petition under paragraph (1), the petitioner may appeal the denial to the Administrator. Such an appeal shall be made in writing within sixty days after the denial and shall contain sufficient information to support the petition.

(B) The Administrator, after consultations with the Governor of the affected coastal State and the Under Secretary, shall grant the petition and designate such coastal waters under this section if the Administrator finds that the coastal waters that are the subject of the petition—

(i) meet the requirements of subsection (a); and

(ii) are of national significance, based upon their living resource characteristics and ecological and recreational values.

(c) IMPLEMENTATION.—Each Governor shall revise the continuing planning process of his or her State developed pursuant to section 303(e) of the Clean Water Act to ensure that the water quality and ecological integrity of coastal waters designated under this section will be maintained and protected. In meeting this requirement, each Governor shall—

(1) post all major public access points to those waters to notify the public of their designation as coastal waters of outstanding national significance;

(2) ensure that the State fully implements an anti-degradation policy for those waters;

(3) provide for the necessary water qualtiy-based effluent limitations to protect and maintain water quality in those waters; and

(4) establish processes and enforceable policies under section 306B(c) of the Coastal Zone Management Act for land uses of the coastal zone adjacent to those waters.

SEC. 205. OCEAN DISCHARGE CRITERIA.

Section 403 of the Clean Water Act is amended as follows:

(1) Subsection (a) is amended to read as follows:

"(a) The Administrator shall not issue or renew any permit under section 402 for a discharge into—

"(1) an estuary designated under section 320;

"(2) outstanding resource waters designated under section 204 of the Coastal Defense Initiative of 1989;

"(3) the territorial sea; or

"(4) the exclusive economic zone;

unless the Administrator or a State permitting authority determines, in compliance with guidelines issued under subsection (c)—

"(A) the need for the discharge and the lack of reasonable alternatives to it, and

"(B) that the discharge will not inhibit or interfere with the protection of public health and the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife or their habitat or with recreation in and on the water.".

(2) Subsection (c)(1) by striking "and the oceans" and inserting in lieu thereof "the oceans, estuaries designated under section 320, or outstanding resource waters designated under section 204 of the Coastal Defense Initiative of 1989".

SEC. 206. MARINE SANITATION DEVICES.

Section 312(k) of the Clean Water Act is amended—

(1) by inserting "(1)" after "(k)";

(2) by inserting "or political subdivisions thereof" after "the States"; and

(3) by adding at the end the following new paragraph:

"(2)(A) A Governor may request in writing that the Secretary enter into, and the Secretary may enter into, a cooperative agreement with the Governor that will authorize

the State or its political subdivisions to enforce the requirements of this section. The request shall be accompanied by whatever additional documentation the Secretary considers necessary to assess the ability of the State or its political subdivisions to enforce this section fairly and efficiently.

"(B) The Secretary shall respond to a written request under this paragraph not later than 180 days after receiving the request. If the Secretary denies the request, the Secretary shall describe fully the reasons for the denial and provide the Governor an opportunity to revise the request to the satisfaction of the Secretary.

"(C) If the Secretary enters into an agreement with a Governor under this subsection, such agreement shall authorize the State or its political subdivisions to assess the penalties authorized by this section. Any penalties so assessed shall be retained by the State or political subdivision thereof to further the purposes of this section.".

SEC. 207. AUTHORIZATIONS FOR THE NATIONAL ESTUARIES PROGRAM.

Section 320(i) of the Clean Water Act is amended by striking "$12,000,000" and inserting in lieu thereof "$16,000,000".

TITLE III—COASTAL MANAGEMENT

SEC. 301. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds the following:

(1) Land use in the coastal zone has a significant effect on coastal water quality, coastal habitat, and living marine and estuarine resources.

(2) State coastal zone managers, because of their extensive experience with coastal land use issues, play an important but currently underutilized role in the protection and restoration of coastal environmental quality.

(3) State coastal zone managers should employ their authorities more fully to restore and protect coastal water quality and critical coastal areas and habitat.

(4) State coastal zone management and water quality programs should cooperate closely in harnessing their collective authorities and expertise to protect coastal water quality.

(b) PURPOSE.—The purposes of this title are the following:

(1) To strengthen the regulatory and administrative links between coastal zone management and water quality programs at the Federal and State levels, particularly for the control of land and water uses which, individually or cumulatively, may—

(A) cause or contribute significantly to the degradation of coastal water quality, or

(B) impair the restoration or attainment of coastal water for future uses.

(2) To encourage each State coastal zone management program to promote sound management of land uses which affect coastal water quality and coastal habitat, particularly from the cumulative effects of coastal development, through the adoption and implementation of a Coastal Water Quality Protection and Improvement Plan in accordance with the amendments made by this title.

(2) To expand State and local authorities, capabilities, and incentives—

(A) to protect critical coastal areas; and

(B) to restore degraded coastal habitats, including degraded coastal waters, where those habitats and waters are adversely affected by coastal land use.

SEC. 302. COASTAL ZONE MANAGEMENT ACT AMENDMENTS.

(a) FINDINGS AND POLICY.

(1) FINDINGS.—Section 302 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1451) is amended by adding at the end the following new subsection and by redesignating the subsequent paragraphs accordingly:

"(k) Land use in the coastal zone, and the use of adjacent lands which drain into the coastal zone, may significantly effect the quality of coastal waters and habitat, and efforts to control coastal water pollution from land use activities must be improved.".

(2) POLICY.—Section 303(2) of the Coastal Zone Management Act of 1972 is amended by inserting the following new subparagraph after subparagraph (B) and by redesignating the subsequent paragraphs accordingly:

"(C) the management of coastal development to protect the quality of coastal waters and to prevent the impairment of existing uses of those waters.".

(b) PROTECTING AND RESTORING COASTAL WATER QUALITY.—The Coastal Zone Management Act is amended by inserting after section 306A the following:

"SEC. 306B. (a) IN GENERAL.—Not later than two years after the date of the enactment of this Act, the management agency designated pursuant to section 306(c)(5) for each State for which the Secretary has approved a program pursuant to section 306, in consultation with the State water quality agency, shall prepare and submit to the Secretary a plan for approval as a Coastal Water Quality Protection Plan (hereafter in this section referred to as the Plan). In develop-

ing the plan, the Governor shall take into account the information and requirements applicable to activities in the coastal zone developed pursuant to sections 208 and 319 of the Clean Water Act.

"(b) PLAN APPROVAL.—

"(1) IN GENERAL.—Not later than one hundred and eighty days after receiving a plan submitted by a State under subsection (a), the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall review the plan and—

"(A) approve it as a Coastal Water Quality Protection Plan under this section if it meets the requirements of subsection (c); or

"(B) remand it to the State with such changes as the Secretary deems appropriate.

"(2) RESUBMISSION.—Not later than one hundred and eighty days after receiving a plan remanded by the Secretary under paragraph (1), a State shall resubmit the plan to the Secretary with such changes as were recommended by the Secretary under paragraph (1).

"(3) EFFECT OF APPROVAL.—A State plan approved under this subsection shall be considered part of the State's approved coastal zone management program and no subsequent approval shall be required for

its implementation, including approval of designations under subsection (c), unless the Secretary determines that such action constitutes an amendment to the plan.

"(4) FAILURE TO SUBMIT APPROVABLE PLAN.—(A) Except as provided in subparagraph (B), the Secretary shall suspend a State's eligibility for financial assistance under title VI of the Coastal Defense Initiative of 1989 and shall withhold up to 70 per centum of the financial assistance that otherwise would have been available to the State under section 306 if the Secretary finds that the State has failed to submit an approvable plan as required under this section.

"(B) If the Secretary finds that a State has made satisfactory progress in developing a plan under subsection (a) and that additional time is required for the State to complete necessary statutory or regulatory changes to develop the plan, the Secretary may authorize one additional year for the State to comply with this section.

"(5) REALLOCATION OF WITHHELD AMOUNTS.—Any funds withheld under subsection (b)(3) shall be reallocated by the Secretary among States which are in compliance with this section.

"(6) REGULATIONS.—Within eighteen months after enactment, the Secretary shall promulgate regula-

tions governing the receipt, review, and approval of Coastal Water Quality Protection Plans under this section.

"(c) PLAN CONTENTS.—The Secretary may approve a plan under this section if it includes the following:

"(1) IDENTIFICATION OF USES.—Identification of all major land uses which, individually or cumulatively, may cause or contribute significantly to a violation of marine water quality standards or may impair existing uses of coastal waters.

"(2) MODEL ORDINANCES.—Establishment and revision from time to time of model ordinances and regulations for use by State and local authorities for encouraging best land use management practices for preventing or reducing pollution of coastal waters by land and water uses, including the use of—

"(A) buffer strips;

"(B) setbacks;

"(C) density restrictions;

"(d) techniques for identifying and protecting critical coastal areas and habitats;

"(E) stormwater management practices;

"(F) sewage disposal practices;

"(G) soil erosion and sedimentation control; and

"(H) siting and design criteria for water uses, including marinas.

"(3) ENCOURAGEMENT AND ASSISTANCE.—Encouragement and assistance to local governments in implementing the model ordinances referred to in paragraph (2), by—

"(A) establishing specific goals for implementation by State or local authorities;

"(B) requiring periodic State review and evaluation of implementation activities;

"(C) identifying local needs for staffing and educational programs to support implementation; and

"(D) providing technical assistance, financial incentives, and demonstration projects to encourage implementation of the model ordinances by local governments and other local innovations to protect coastal water quality.

"(4) PROTECTION OF OUTSTANDING RESOURCE WATERS.—Contains enforceable policies, and a mechanism to implement those policies, by which the State agency designated pursuant to section 306(c)(5) shall review activities identified pursuant to paragraph (1) and shall certify that they will not result in the deterioration of water quality, impairment of existing water

uses, or degradation of habitats and living resources, in those areas designated as Outstanding Resource Waters under section 204 of the Coastal Resources Protection Act of 1989.

"(5) PROTECTION AND RESTORATION.—Establishment of enforceable policies, and a mechanism to implement those policies, for reducing pollution and protecting and restoring coastal resources in accordance with subsection (d).

"(6) ADMINISTRATIVE COORDINATION.—Establishment of mechanisms to improve coordination between State agencies and between State and local officials responsible for land use planning and permitting, water quality permitting and enforcement, habitat, and public health and safety, through the use of joint project reviews, interagency certifications, memoranda of agreements, and other mechanisms.

"(7) STATE COASTAL ZONE BOUNDARY MODIFICATION.—Modification of the boundaries of the State coastal zone as the Governor determines is necessary to manage the activities identified pursuant to paragraph (1) and to implement, as may be required, the recommendations made pursuant to section 303(a) of the Coastal Defense Initiative of 1989.

"(d) RESTORATION AND PROTECTION POLICIES.—

"(1) IN GENERAL.—The policies and mechanisms included in a State plan under this section shall apply to those activities identified under subsection (c)(1) and shall be designed to improve coastal water quality and to restore impaired water uses and habitat in those coastal areas identified under section 203 of the Coastal Defense Initiative Act of 1989—

"(A) in which applicable marine water quality standards are not being achieved; and

"(B) in which applicable marine water quality standards are currently being met but which are identified as threatened.

"(2) POLLUTION REDUCTION.—A State plan under this section shall require the State coastal zone agency, working in conjunction with the State water pollution control agency—

(A) to establish and implement from time to time a schedule of specific pollution reduction goals applicable to the activities identified under subsection (c)(1) in accordance with the control strategies required under section 203 of the Coastal Defense Initiative Act of 1989; and

(B) to require that agency to certify that each such activity is adhering to and in compliance with the schedule in accordance with this

section and section 203(d)(2) of the Coastal Defense Initiative Act of 1989.

"(e) TECHNICAL ASSISTANCE.—The Under Secretary, in conjunction with the Administrator, shall provide technical assistance to States and local governments in developing and implementing State plans under this section. Such assistance shall include—

"(1) methods for assessing water quality impacts associated with coastal land uses;

"(2) methods for assessing the cumulative water quality effects of coastal development;

"(3) maintaining and from time to time revising an inventory of model ordinances for use by State and local governments; and

"(4) assisting in developing model ordinances and best management practices to meet the requirements of section 306(B)(b)(3) of the Coastal Zone Management Act.

SEC. 303. BOUNDARIES AND TECHNICAL ASSISTANCE.

(a) INLAND BOUNDARIES.—

(1) REVIEW OF BOUNDARIES.—The Administrator shall within eighteen months of the date of enactment of this Act review the inland coastal zone boundary of each State program which has been approved or is proposed for approval by the Secretary under section

306 of the Coastal Zone Management Act and evaluate whether the boundary extends inland to the extent necessary to control the land and water uses that have a significant impact on coastal waters of the State.

(2) RECOMMENDATION OF MODIFICATION.—If the Administrator finds that modifications to the inland boundaries of a State's coastal zone are necessary for that State to manage better land and water uses in order to protect coastal water quality, the Administrator shall recommend appropriate modifications in writing to the Secretary and the affected State.

SEC. 304. COORDINATION WITH NATIONAL ESTUARY PROGRAM.

(a) ISSUANCE OF REGULATIONS.—To promote coordination between the National Estuary Program established by section 320 of the Clean Water Act and the Coastal Zone Management Program the Secretary shall not later than twelve months after the date of the enactment of this Act issue regulations governing the incorporation of Comprehensive Conservation and Management Plans under section 320 of the Clean Water Act into State management programs approved under section 306 of the Coastal Zone Management Act.

(b) Each state agency designated under section 306(c)(5) to administer a State coastal zone management program

shall designate a representative for each management conference convened under section 320 of the Clean Water Act that includes coastal lands and waters within that State, and shall request that the representative be appointed by the Administrator to an appropriate position on the management conference.

(c) CONSERVATION AND MANAGEMENT PLAN DEEMED APPROVED.—If a State management agency designated pursuant to section 306(c)(5) of the Coastal Zone Management Act certifies that a Comprehensive Conservation and Management Plan complies with regulations issued under this section, then it is deemed to be approved as a component of that State's management program under section 306 of the Coastal Zone Management Act.

TITLE IV—NATIONAL COASTAL MONITORING PROGRAM

SEC. 401. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds the following:

(1) Existing mandates for environmental monitoring of coastal waters fail to address adequately the need for reliable, useful information on environmental trends in coastal waters.

(2) There is a need for a Federal, State, and private partnership in developing and implementing coast-

al environmental monitoring programs on a regional and local basis.

(3) Future coastal monitoring efforts by all levels of government and the private sector must be structured to produce information to assist State and local officials in identifying coastal pollution problems and in developing and implementing effective responses to those problems.

(4) Monitoring of surface water quality, including monitoring of sediments and living resources, is an important source of information for proper water quality management decisionmaking by Federal, State, and local governments.

(5) Existing methods for monitoring and assessing coastal waters lack uniformity and need to be standardized.

(6) Results of current coastal water monitoring programs are often not reported in forms useful to environmental managers, especially at the local level.

(7) Special efforts must be made to ensure that the monitoring information generated by these programs is made available to State and local officials in a timely and useful manner.

(b) PURPOSES.—The purposes of this title are to—

(1) develop a national strategy for coastal environmental monitoring based on a system of regional monitoring programs;

(2) improve the quality and comparability of marine environmental monitoring efforts by developing uniform national coastal environmental monitoring protocols;

(3) redesign and consolidate existing monitoring programs as appropriate into an integrated national system for evaluating regional coastal water quality;

(4) enhance regional capabilities to monitor and assess the environmental quality of estuarine and marine waters;

(5) promote the use of water-related data in management decisions at the Federal, State, and local levels; and

(6) improve the usefulness and reliability of monitoring data and information in environmental management by establishing a national coastal monitoring data center.

SEC. 402. NATIONAL COASTAL ENVIRONMENTAL MONITORING TASK FORCE.

(a) ESTABLISHMENT.—For the purpose of carrying out the requirements of section 403, there is established a National Coastal Environmental Monitoring Task Force.

(b) MEMBERSHIP.—The Task Force shall consist of the following individuals or, with respect to paragraphs (1) through (4), their designees with expertise in coastal monitoring or coastal regulatory affairs:

(1) the Under Secretary, who shall serve as the Chairperson of the Task Force.

(2) The Administrator.

(3) Representatives of other appropriate Federal agencies, who shall be selected by the Chairperson.

(4) Four representatives of State governments to be selected by the Chairperson, to include one individual representing an Atlantic coastal State, one individual representing a Gulf of Mexico coastal State, one individual representing a Pacific coastal State, and one individual representing a Great Lakes State.

(5) Two representatives of the marine scientific community with recognized expertise in coastal monitoring programs.

SEC. 403. NATIONAL COASTAL ENVIRONMENTAL MONITORING STRATEGY.

The Task Force shall—

(1) develop and publish a national strategy for conducting coastal environmental monitoring through use of regional monitoring programs;

(2) publish not later than nine months after the date of the enactment of this Act a memorandum of understanding between all appropriate Federal agencies, which shall outline a process for implementing that strategy at the Federal level;

(3) develop national monitoring protocols in accordance with section 404;

(4) seek the advice and technical assistance of recognized authorities in the development of those protocols;

(5) develop a national network of regional monitoring programs under section 405;

(6) review, approve, and periodically evaluate regional plans under section 406; and

(7) develop and implement a national monitoring data management and dissemination system under section 408.

SEC. 404. DEVELOPMENT OF COASTAL ENVIRONMENTAL MONITORING PROTOCOLS.

(a) IN GENERAL.—Not later than eighteen months after the date of the enactment of this Act, the Task Force, with the technical assistance of the National Bureau of Technology and Standards, shall develop uniform protocols for monitoring coastal water quality to—

(1) assess long-term conditions and trends;

(2) assist in the development of regulatory programs to restore and protect coastal water quality; and

(3) assess the effectiveness of coastal protection programs.

(b) COASTAL ENVIRONMENTAL MONITORING PROTOCOLS.—The protocols referred to in subsection (a) shall include—

(1) protocols for designing monitoring networks and monitoring surveys;

(2) protocols for sampling and analysis, including appropriate physical and chemical parameters, living resource parameters, and sediment analysis techniques;

(3) protocols for intercalibration and quality control; and

(4) other appropriate protocols.

(c) PERIODIC REVIEW OF PROTOCOLS.—The Task Force shall periodically review the protocols developed under subsection (a) in order to evaluate their effectiveness, the degree to which they continue to provide the necessary uniformity while taking account of regional and local conditions, the extent to which Federal agencies are adhering to the protocols, and the need to modify for supplement the protocols with new protocols.

SEC. 405. REGIONAL MONITORING PLANS.

(a) ESTABLISHMENT.—The Task Force shall authorize the development by regional monitoring teams of regional coastal environmental monitoring plans which shall—

(1) identify the current environmental conditions of the coastal waters to which the plan applies and the resources therein;

(2) establish a sound technical basis for coastal environmental management decisionmaking;

(3) incorporate appropriately standardized methods for sampling, analysis, and data management, taking into account the need for flexibility to respond to local conditions;

(4) make better use of funds available for coastal environmental monitoring within that region;

(5) involve the public, local environmental managers, and the scientific community as full participants; and

(6) inform the public on the status and trends in coastal environmental quality.

(b) CRITERIA.—The Task Force shall develop and publish criteria for selecting coastal regions that may be eligible for the development of a regional coastal monitoring program. The criteria shall identify the characteristics for selecting regions that encompass coastal water bodies that are distinct ecological systems or subsystems which may merit des-

ignation under subsection (c), taking into account the purposes of this title and—

(1) the degradation of coastal environmental quality that is occurring or is expected to occur in the region;

(2) the adequacy of existing regulatory mechanisms to protect and restore coastal environmental quality in the region;

(3) the need for a monitoring program for the region; and

(4) the willingness of State and local authorities in the region to participate in a regional program.

(c) DESIGNATION.—

(1) IN GENERAL.—The Task Force shall not later than eighteen months after the date of enactment of this Act and after notice and public comment, designate those coastal regions for which a regional monitoring program should be developed.

(2) CONSULTATION.—The Task Force shall consult with potentially affected Governors, local officials and institutions in the region prior to any such designation and shall provide written notice of any such designation to the Governor of each State within which any portion of the region is located.

SEC. 406. PLAN DEVELOPMENT.

(a) REGIONAL MONITORING TEAMS.—After a coastal region has been designated under section 405(c), the Task Force, with the participation of the affected Governor, shall select and designate a regional monitoring team for the region. The purpose of the regional monitoring team shall be to develop and implement a regional monitoring plan under subsection (b). The membership on the regional monitoring team shall include—

(1) a representative of the Under Secretary, who shall have primary responsibility for overseeing the regional monitoring program in close cooperation with affected States, and representatives of such other Federal agencies as the Under Secretary determines is appropriate;

(2) the Governors of participating States or their designees;

(3) representatives with recognized expertise and interest in coastal monitoring activities within the region, as determined by the Under Secretary and in close consultation with affected Governors, from—

(A) local governments;

(B) private sector institutions;

(C) the scientific community; and

(D) the public at large.

(b) CHAIRMAN.—The chairman of each regional monitoring team shall be selected by the members of that team from among its members.

(c) PLAN CONTENTS.—Each regional monitoring team shall, after notice and comment, develop a monitoring plan that—

(1) describes and characterizes the institutional and environmental setting of the region;

(2) identifies the water quality objectives of the monitoring program;

(3) identifies and describes the types of monitoring networks, surveys and other activities that will be necessary to achieve those objectives;

(4) assesses existing coastal monitoring activities in the region and integrates them, as appropriate, into the plan;

(5) specifies the implementation requirements of the plan in accordance with subsection (d); and

(6) provides technical guidance to those charged with implementing the plan, including guidance to—

(A) appropriate sampling networks and surveys;

(B) the type and extent of sampling tests;

(C) quality assurance techniques; and

(D) data management and analysis techniques.

(c) PLAN APPROVAL.—

(1) SUBMISSION OF PROPOSED PLAN.—The regional monitoring team shall submit its proposed regional monitoring plan to the Task Force not later than eighteen months after the regional monitoring team is constituted. The Task Force shall review the proposed plan and approve it if it meets the requirements of this section or recommend to the regional monitoring team modifications to the regional monitoring plan within thirty days after receiving the plan.

(2) MODIFICATION OF PROPOSED PLAN.—The regional monitoring team shall make the appropriate changes to the regional monitoring plan and submit them to the Task Force not later than sixty days after their receipt.

(3) DEVELOPMENT OF PLAN BY UNDER SECRETARY.—If the regional monitoring team does not develop and submit an appropriate regional monitoring plan under this section the Under Secretary may, in cooperation with the Administrator and in consultation with the affected Governors, develop it in accordance with the requirements of this section.

(d) PLAN IMPLEMENTATION.—Each regional monitoring plan shall—

(1) identify a lead State or regional authority for administering the implementation of the plan;

(2) identify the public and private parties which will implement the plan and a detailed schedule for its implementation;

(3) describe all Federal and State programs or activities currently or anticipated to be carried out in the region and the responsibilities for implementation of the plan that those programs and activities shall assume;

(4) describe all discharges into the coastal waters of the region and the implementation responsibilities that they will assume; and

(5) identify changes in Federal, State, and local programs necessary to implement the program.

SEC. 407. COMPLIANCE AND ENFORCEMENT.

(a) BINDING REQUIREMENTS.—The implementation requirements of an approved regional monitoring plan included pursuant to section 406(d) shall be binding on all Federal, State, and local officials and private parties identified in the implementation provisions of the regional monitoring plan pursuant to that section.

(b) ENFORCEMENT.—

(1) INCORPORATION INTO THE MPRSA.—The Under Secretary, the Administrator, and the Governor of each participating State, shall ensure compliance with a regional monitoring plan adopted under section 406. The requirements of an approved regional monitoring plan is deemed to be a requirement of title I of the Marine Protection, Research, and Sanctuaries Act of 1972 for purposes of section 105 of that Act.

(2) INCORPORATION INTO STATE COASTAL MANAGEMENT PLAN.—The requirements of an approved regional monitoring program are deemed to be a part of any approved State coastal zone management plan of a participating coastal State for the purposes of section 307 of the Coastal Zone Management Act and shall be binding upon Federal activities pursuant to section 307(c) of that Act.

(c) INCORPORATION INTO DISCHARGE PERMITS.—The Administrator or a State permitting authority shall, upon the approval of a regional monitoring plan under section 406 and after the necessary notice and opportunity to comment, incorporate into the appropriate discharge permits the applicable monitoring requirements specified by the implementation provisions of the plan. The incorporation is deemed to be a minor modification of such permit.

SEC. 408. NATIONAL COASTAL MONITORING DATA CENTER.

(a) IN GENERAL.—There is established in the National Oceanic and Atmospheric Administration the National Coastal Monitoring Data Center. The Monitoring Data Center shall develop a national monitoring data and information management system, to which all national, regional, and local monitoring data developed under this Act shall be transmitted.

(b) DEVELOPMENT OF UNIFORM DATA AND INFORMATION MANAGEMENT SYSTEMS.—The Under Secretary, in cooperation with the Task Force, shall—

(1) examine existing Federal and State monitoring data management systems; and

(2) issue guidance for the development of compatible data and information management systems that promotes to the greatest degree possible the compatibility and usefulness of such systems, consistent with the need for flexibility to respond to regional or local needs.

(c) DISSEMINATION OF DATA AND INFORMATION.—The National Monitoring Data Center shall make available all data and information it receives and communicate appropriate services for data transfer to the Administrator and other Federal officials, State and local governments and the public.

(d) ACCESS.—Any citizen of the United States shall have access to all reports and data maintained at the National Monitoring Data Center.

TITLE V—COMPLIANCE AND ENFORCEMENT

SEC. 501. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds and declares that—

(1) many coastal waters are in serious condition and do not meet applicable water quality standards; and

(2) existing means to enforce compliance with those standards need strengthening.

(b) PURPOSES.—It is therefore the purpose of this title to—

(1) authorize the Federal Government to deny Federal contracts and Federal financial assistance to persons found to be in violation of applicable discharge requirements;

(2) clarify the authority of the Administrator to issue administrative orders and assess administrative penalties against Federal facilities found not to be in compliance with applicable discharge requirements;

(3) require Federal and certain industrial facilities discharging pollutants into coastal waters to establish environmental auditing programs as a supplement to

their self-monitoring obligations under the Clean Water Act;

(4) require the Administrator to assess penalties to ensure that dischargers of pollutants into coastal waters do not benefit financially from noncompliance with applicable discharge requirements;

(5) require coastal States to inform the public when coastal waters are not meeting applicable marine water quality standards; and

(6) authorize citizens to bring suits to enforce the provisions of this Act pursuant to section 105 of the Marine Protection, Research, and Sanctuaries Act.

SEC. 502. FEDERAL PROCUREMENT.

(a) IDENTIFICATION OF VIOLATORS.—The Administrator shall identify and provide to Federal agencies a list of those persons discharging pollutants into coastal waters who have been found by the Administrator to be—

(1) in significant noncompliance with discharge permits issued pursuant to section 402 of the Clean Water Act by the Administrator or a State permitting authority;

(2) in substantial violation of requirements established in a management program developed pursuant to section 319 of the Clean Water Act; or

(3) in substantial violation of requirements established by a management conference pursuant to section 320 of the Clean Water Act.

The Administrator shall revise this list semiannually.

(b) ELIGIBILITY FOR FEDERAL CONTRACTS.—No Federal agency may enter into any contract with any person listed by the Administrator under subsection (a) for the procurement of goods, materials, or services if the contract is to be performed at any facility owned, leased, operated, or supervised by that person.

(c) DURATION OF PROHIBITION.—A prohibition in subsection (b) shall continue in effect for such person until the Administrator certifies that the condition giving rise to the finding in subsection (a) has been corrected and the environmental audit required by section 505 has been performed.

(d) REGULATIONS.—Each Federal agency shall review and revise its procurement procedures and regulations where necessary to implement the requirements of this title.

SEC. 503. LIMITATIONS ON FEDERAL FINANCIAL ASSISTANCE.

(a) FEDERAL ASSISTANCE.—Except as provided in subsection (e), no Federal agency may approve any project or award any grant for any activity or undertaking that may adversely affect coastal water quality or coastal land and water use, as determined by the Administrator by regulation after notice and public comment, to—

(1) any coastal State which the Administrator has found to have demonstrated a pattern of substantial and continuing failure to achieve and maintain applicable marine water quality standards; or

(2) any coastal State which the Administrator has found to have failed to implement and enforce an approved comprehensive management plan for an estuary designated pursuant to section 320 of the Clean Water Act.

(b) IDENTIFICATION OF VIOLATORS.—The Administrator shall provide annually to the heads of all affected agencies the information necessary to carry out the prohibition in subsection (a).

(c) DURATION OF PROHIBITION.—A prohibition under subsection (a) shall continue in effect with respect to a coastal State until the Administrator certifies to the coastal State and affected Federal agencies that the conditions giving rise to the findings made pursuant to subsection (a) with respect to that State have been corrected and the applicable marine water quality standards are being achieved.

(d) REGULATIONS.—

(1) The Administrator shall promulgate regulations, after notice and public comments that identify the types of projects, grants, and other undertakings that are subject to the requirements of subsection (a).

(2) Following the issuance of regulations under paragraph (1), each Federal agency with projects, grants or other undertakings that are subject to this section shall review and revise as necessary their procedures and regulations governing those undertakings to comply with the requirements of this section.

(e) EXCEPTION.—The requirements of subsection (a) shall not apply to any Federal project, grant or other undertaking whose direct and principal purpose relates to public health or public safety.

SEC. 504. FEDERAL FACILITY COMPLIANCE.

(a) WAIVER OF SOVEREIGN IMMUNITY.—For purposes of enforcing any substantive or procedural requirement of this Act or the Clean Water Act (including but not limited to any injunctive relief, administrative order, or civil, criminal, administrative penalty, or other sanction), against any Federal department, agency, or instrumentality discharging pollutants into coastal waters, the United States hereby expressly waives any immunity otherwise applicable to the United States.

(b) ADMINISTRATIVE ENFORCEMENT ACTIONS.—The Administrator may commence an administrative enforcement action against any department agency, or instrumentality of the executive branch to enforce the provisions of this Act. In any such action, the administrative procedures and remedies,

including mandatory and prohibitory equitable relief and penalties, applicable to other persons under section 105 of the Marine Protection, Research, and Sanctuaries Act shall be applied.

SEC. 505. ENVIRONMENTAL AUDITING PROGRAM.

(a) FEDERAL FACILITIES.—

(1) ENVIRONMENTAL AUDITING PROGRAMS.—Each Federal department, agency or instrumentality which owns or operates a facility that discharges into coastal waters that would qualify it as a major discharger if it were an industrial facility, as determined by the Administrator, shall develop and implement a program to conduct, on an ongoing basis, environmental audits of its qualifying facilities to determine compliance with the requirements of this Act and the Clean Water Act.

(2) SUBMISSION OF PLAN.—(A) Within one year after the date of enactment of this Act, each Federal department, agency, or instrumentality subject to paragraph (1) shall submit to the Administrator a plan to carry out environmental audits of its qualifying facilities and to correct any incident of noncompliance with any requirements of the Clean Water Act or this Act that may be found as a result of the environmental audit.

(B) During the first year of implementation of a plan under this section, each Federal department, agency, or instrumentality that is subject to paragraph (1) shall conduct environmental audits on a biannual basis for the first year, and thereafter from time to time as determined by the Administrator.

(b) NONCOMPLYING FACILITIES.—Each industrial discharger of pollutants into coastal waters that is found by the Administrator or a State permitting authority to be in significant noncompliance with a discharge permit shall conduct on a quarterly basis an environmental audit of the facilities subject to the permit to assess its compliance with the requirements of the Clean Water Act. The industrial facility shall conduct these audits until such time as the Administrator certifies that the condition giving rise to the finding has been corrected and the facility is no longer in violation of applicable permit requirements.

(c) PERMIT RENEWALS.—Prior to the renewal of any permit issued by the Administrator or a State permitting authority authorizing the discharge of pollutants into coastal waters, each major discharger shall provide to the Administrator a certification by an environmental auditor that an environmental audit of the major discharger has been conducted within the previous three months and that the auditor has

certified that the facility is in compliance with all requirements of the Clean Water Act.

(d) AUDIT REQUIREMENTS.—The audit required under subsections (b) and (c) shall be conducted by an independent environmental auditor certified in accordance with subsection (f), unless the Administrator determines that the permittee has an internal environmental auditing program which is fully consistent with the regulations issued by the Administrator under subsection (e) of this section. Copies of the audit shall be provided to the Administrator and the appropriate State official and may, upon request, be provided to the public.

(e) REGULATIONS AND GUIDANCE.—Within one year from the date of the enactment of this Act, the Administrator shall—

(1) issue regulations on the development and implementation of environmental auditing programs; and

(2) Issue guidance to States on the development and establishment of State programs to certify persons qualified to perform environmental audits under this section.

(f) CERTIFICATION REQUIREMENTS.—

(1) IDENTIFICATION OF REQUIREMENTS.—Within three months after the date of enactment of this Act, the Administrator shall convene a forum of interested professional organizations to identify eligibility

requirements for certification of environmental auditors and continuing education requirements for maintaining that certification.

(2) PUBLICATION OF GUIDELINES.—Within nine months after the date of enactment of this Act, the Administrator shall publish guidelines for States to certify environmental auditors based on information identified by the forum convened under paragraph (1) of this subsection and a list of auditors that the Administrator finds are qualified to meet the guidelines.

(3) INTERIM SELECTIONS.—Until such time as a State has established a program for certifying environmental auditors that is consistent with the guidelines published by the Administrator under paragraph (2) and unless the Administrator has determined that the permittee has an internal environmental auditing program which is fully consistent with the regulations issued under subsection (e), a person shall select an auditor from the list published by the Administrator in order to meet the requirements of subsections (b) and (c).

(4) STATE CERTIFICATION.—When a State has developed a program for the certification of environmental auditors that is consistent with the guidance issued by the Administrator under subsection (e), a dis-

charger may select an auditor from a list of certified environmental auditors provided by the State in which the discharger is located.

SEC. 506. ELIMINATION OF ECONOMIC INCENTIVES.

(a) PENALTIES UNDER THE CLEAN WATER ACT.—Section 309 of the Clean Water Act is amended by adding at the end the following new subsection:

"(h) Notwithstanding any limitation on the amount of a penalty established under this section, any penalty assessed by the Administrator or a court in a civil action against a person discharging pollutants into coastal waters for a violation of applicable effluent limitations or other permit requirements shall be not less than an amount that eliminates any economic benefit or savings, including interest, that may have accrued to that person as a result of the violation.".

(b) PENALTIES UNDER THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT.—Section 105 of the Marine Protection, Research, and Sanctuaries Act of 1972 is amended by adding at the end the following new subsection:

"(i) Notwithstanding any limitation on the amount of penalty established in this section, any penalty assessed by the Administrator or by a court in a civil action for a violation under this section shall be not less than an amount that eliminates any economic benefit or savings, including inter-

est, that may have accrued to the violator as a result of the violation.".

SEC. 507. POSTING OF COASTAL WATERS.

(a) REQUIREMENTS.—Each State that has coastal waters within its boundaries that do not meet applicable water quality standards shall post and maintain a clearly visible sign at each major place of public access to those waters (including public roads, public beaches, public parks and recreation areas, public marinas and boat launching areas) indicating which water quality standards the particular waterbody does not meet. The sign shall be maintained until the particular waterbody is in compliance with all applicable water quality standards.

(g) GUIDANCE.—Within six months after the date of enactment of this Act, the Administrator shall issue guidance to States on the requirements in subsection (a).

SEC. 508. ENFORCEMENT.

Any violation of the requirements of this Act shall be deemed a violation of title I of the Marine Protection, Research and Sanctuaries Act for the purposes of section 105 of that Act.

TITLE VI—FUNDING

SEC. 601. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds the following:

(1) Federal, State, and local programs for protecting water quality, preserving valuable coastal habitat and directing properly the growth and development in coastal areas are in need of substantial and predictable funding sources.

(2) Public funding has proven inadequate to meet the needs of these programs.

(3) Projected demands on public funding in the foreseeable future limit the ability to increase sufficiently the funds available for these programs.

(b) PURPOSES.—It is therefore the purpose of this title to—

(1) authorize the creation of coastal protection funds in each coastal State to finance Federal, State, and local efforts to preserve and protect coastal environmental quality;

(2) impose nationally required charges upon activities that directly and substantially affect the environmental quality of coastal areas;

(3) use the revenues from these charges and other sources to capitalize Federal and State coastal protection funds; and

(4) authorize the financing of State and local programs to protect and enhance coastal environmental

quality by these Federal and State coastal protection funds.

SEC. 602. COASTAL DEFENSE FUND.

(a) ESTABLISHMENT OF FUND.—

(1) IN GENERAL.—There is hereby established in the Treasury of the United States a separate account, to be known as the "Coastal Defense Fund" consisting of such amounts as may be deposited into it or transferred to it pursuant to this title.

(2) INVESTMENT.—The Secretary of the Treasury shall invest such portion of the Fund as may remain unobligated in any one fiscal year in interest-bearing obligations of the United States. The interest on, and the proceeds from the sale of, the interest-bearing obligations shall be deposited into and become a part of the Fund.

(b) PAYMENTS INTO THE COASTAL DEFENSE FUND.—Notwithstanding any other law, the following amounts shall be credited to the Fund:

(1) Receipts from the coastal effluent charge system established by section 604 that are assessed by the Administrator.

(2) Transfers from the Offshore Oil Pollution Compensation Fund that are authorized by section 605 of this title.

(3) Receipts from the fines, penalties, and other payments assessed under section 309 of the Clean Water Act against dischargers into coastal waters or assessed under section 105 of the Marine Protection, Research, and Sanctuaries Act.

(4) Repayments of loans and obligations made pursuant to section 308 of the Coastal Zone Management Act of 1972.

(5) Transfers of receipts from the development of mineral resources of the Outer Continental Shelf as required under section 608.

SEC. 603. STATE GRANTS.

(a) ANNUAL GRANTS.—The Administrator and the Under Secretary shall make annual grants from amounts in the Coastal Defense Fund to a coastal State that—

(1) establishes its own coastal resources protection fund into which it will deposit grants under this section;

(2) agrees to deposit into its coastal protection fund all receipts from the coastal effluent charge system established under section 604 where the State is a State permitting authority;

(3) agrees to make grants and other expenditures from its fund in accordance with the requirements of this section;

(4) agrees to undertake such periodic reporting and accounting procedures as the Administrator and Under Secretary consider necessary, after taking into account the need to minimize administrative overhead and reporting.

(b) DISTRIBUTION FORMULA.—The amount of each grant shall be determined by the Administrator and the Under Secretary in accordance with a formula developed by the Administrator and the Under Secretary, which shall take into account—

(A) the extent and nature of the shoreline and area of a State's coastal zone;

(B) the existing and projected trends in population in a State's coastal zone;

(C) the identification by a State of coastal waters under section 203 or 204;

(D) the participation of a State in the Coastal Zone Management Program;

(E) the participation by a State in the regional monitoring program under title V; and

(F) any other factors the Administrator and Under Secretary deem important.

(c) ALLOCATIONS.—The Administrator and the Under Secretary shall cooperate closely in making grants under this section to maximize the effectiveness and efficiency of the

funds in restoring, protecting and enhancing coastal environmental quality. The Administrator and the Under Secretary shall allocate the funds as follows:

(1) Forty per centum of the revenues available in the Coastal Defense Fund per year shall be available to the Administrator for grants to coastal states in accordance with the formula developed under subsection (b) for the following purposes—

(A) the identification of those coastal waters of the State under section 203 and the preparation of control strategies required by that section;

(B) the preparation, implementation, and enforcement of plans for outstanding resource waters as authorized by section 204;

(C) the issuing of grants and loans to publicity owned treatment works discharging into coastal waters to assist them implementing and enforcing effective pretreatment programs in accordance with title III of the Clean Water Act; and

(D) the treatment or elimination of discharges into coastal waters from combined sewer overflows.

(2) Forty per centum of the revenues in the Coastal Defense Fund per year shall be available to the Under Secretary for grants to coastal States in ac-

cordance with the formula developed under subsection (b) for the following purposes—

(A) the preparation and implementation of Coastal Water Quality Protection Plans under section 306B of the Coastal Zone Management Act;

(B) the preparation of enforceable policies and implementation mechanisms for Outstanding Resource Waters under section 306B(c)(4) of the Coastal Zone Management Act;

(C) the preparation and implementation of protection and restoration plans for coastal waters under section 306B(d) of the Coastal Zone Management Act; and

(D) the implementing of regional monitoring programs authorized by title V.

(3) Twenty percent of the revenues available in the Coastal Defense Fund for each year shall be available to the Administrator and the Under Secretary, to be divided equally, to fulfill the requirements of this Act.

SEC. 604. COASTAL EFFLUENT CHARGE SYSTEM.

(a) ESTABLISHMENT OF SYSTEM.—No later than two years after the enactment of this Act, the Administrator shall establish a National Coastal Effluent Charge System applica-

ble to all coastal discharges identified by the Administrator or a State permitting authority.

(b) OBJECTIVES.—The objectives of the effluent charge system are—

(1) to provide economic incentives for coastal dischargers to eliminate, or where elimination is not possible, to reduce the volume or toxicities of their effluents;

(2) to raise $100,000,000 for the Coastal Defense Fund and for State and local coastal programs; and

(3) to supplement existing public funding for Federal, State, and local programs to achieve and maintain coastal environmental quality.

(c) SCHEDULE OF CHARGES.—The Administrator shall establish a schedule of charges to be assessed annually against each coastal discharger. The Administrator shall establish such categories, classes, types, and sizes of coastal discharges as the Administrator considers appropriate, and shall base the schedule of charges on the following variables, taking into account the need for simplicity, fairness, and ease of implementation:

(1) The average daily volume of effluents authorized to be discharged.

(2) The relative toxicity of the discharge.

(3) The ability of the dischargers within that category or class to reduce volume or toxicity in their effluents.

(4) Issues of equity among dischargers.

(5) Other factors that the Administrator determines are necessary to meet the objectives in subsection (b).

(d) MINIMUM AND MAXIMUMS.—In establishing schedules of charges under this section, the Administrator shall require all major coastal dischargers to pay no less than $ and no more than $ annually. The Administrator shall require all minor dischargers to pay no less than $ and no more than $ annually.

(e) HARDSHIP EXEMPTION.—In establishing the effluent charge schedule, the Administrator shall provide for a special hardship exemption applicable to individual coastal discharges upon a showing by an applicant that—

(1) the applicant is unable to make the required payments without undue financial hardship;

(2) the circumstances characterizing the applicant differ materially from other coastal discharges sufficiently to justify the granting of an exemption while requiring other coastal discharges in the same class or category to pay the charge; and

(3) such other factors the Administrator considers appropriate.

An exemption shall be granted by the Administrator after notice and public comment, and shall expire no later than the date of expiration of the permit issued under section 402 of the Clean Water Act or the corresponding State authority in the case of direct dischargers or the authorization to introduce pollutants into publicly owned treatment works in the case of significant industrial users.

(f) ASSESSMENTS.—

(1) IN GENERAL.—Subject to paragraph (2), the Administrator shall assess the coastal effluent charges under this section against all coastal dischargers not later than one year after promulgating the schedule of charges under subsection (c). Charges paid to the Administrator shall be deposited into the Coastal Defense Fund established by section 602.

(2) STATE ASSESSMENTS.—Except as provided in paragraph (3), each State that is a State permitting authority shall assess the coastal effluent charge discharge fee against all coastal dischargers except significant industrial users that are subject to their approved program within one year after the Administrator promulgates the schedule of charges under subsection (c). All revenues received by a State under this section

shall be deposited into that State's coastal protection fund.

(3) EXEMPTIONS.—(A) A coastal State that is subject to paragraphs (1) or (2) may petition the Administrator for an exemption from the national effluent charge system established under this section if the coastal State establishes that it currently requires its coastal dischargers to pay discharge fees or other levies that are substantially similar in scope and purpose to the national system.

(B) The Administrator may grant the petition if, after notice and public comment, the Administrator determines that requiring the coastal State to assess the effluent charges would not further the purposes of the program and would create unnecessary inequities among coastal dischargers in the several States.

(4) INDUSTRIAL USERS.—(A) Each significant industrial user of a publicly owned treatment works shall pay annually a charge based upon the amount of pollutants authorized to be introduced into the treatment works, as reflected by its permit or other agreement with the publicly owned treatment works in the same amount as if it were a direct discharger, as determined by the schedule of charges promulgated by the Administrator.

(B) The municipal authority shall retain the charges paid by its significant industrial users to implement and enforce its pretreatment program under title III of the Clean Water Act or other activities affecting coastal water quality as authorized under the Clean Water Act, the Coastal Zone Management Act of 1972, or the Coastal Defense Initiative of 1989. The publicly owned treatment works shall submit such reports on receipts and expenditures under this section as the State permitting authority or the Administrator shall from time to time require.

(5) The initial charges shall be based upon the relevant variables contained in the permit held by the coastal discharger the time of the assessment. Thereafter, the amount of the charge shall be modified, as necessary, at the time the permit to discharge is renewed. Charges shall attach to the issuance of all new permits for coastal discharges at the time of issuance, and thereafter be modified as necessary at the time of permit renewal.

(h) RELATIONSHIP TO OTHER REQUIREMENTS.—The effluent charge system established under this section shall be in addition to, and not in lieu of, all requirements of the Clean Water Act. Nothing in this section shall effect the obli-

gation of coastal dischargers to comply with the requirements of the Clean Water Act.

SEC. 605. AMENDMENTS TO THE OFFSHORE OIL POLLUTION COMPENSATION FUND.

(a) TRANSFERS.—Section 302(c) of the Outer Continental Shelf Lands Act Amendments of 1978 is amended—

(1) by striking "and" at the end of paragraph (2);

(2) by striking the period at the end of paragraph (3) and inserting in lieu thereof "; and"; and

(3) by adding at the end the following new paragraph (4):

"(4) making whatever transfers to the Coastal Defense Fund established by section 602 of the Coastal Defense Initiative as are necessary to maintain the Offshore Oil Pollution Fund at no more than $99,000,000.".

(b) CONFORMING AMENDMENT.—Section 302(d) of the Outer Continental Shelf Lands Act Amendments of 1978 is amended in paragraph (2) by striking the remainder of the third sentence after "$100,000,000" and inserting in lieu thereof the following: ", after meeting the requirements of subsection (c), above."

SEC. 606. AMENDMENTS TO THE COASTAL ENERGY IMPACT FUND.

Section 308 of the Coastal Zone Management Act is amended by inserting at the end thereof the following new subsection:

"(m)(1) The Secretary shall deposit into the Coastal Defense Fund established by section 602 of the Coastal Defense Initiative of 1989 (1) all unobligated funds under section 308 and (2) all payments of principle and interest received after September 20, 1989, under any loan made under section 308(d)(1), or any deobligation made available under section 308.".

SEC. 607. FINES, PENALTIES, AND OTHER PAYMENTS.

Any penalty, fine or other payments assessed (1) pursuant to section 509 of the Clean Water Act against a discharger into coastal waters, or (2) under section 105 of the Marine Protection, Research and Sanctuaries Act, shall be deposited into the Coastal Defense Fund established by section 602.

SEC. 608. OUTER CONTINENTAL SHELF REVENUES.

Beginning in fiscal year 1990 and in each fiscal year thereafter, the Secretary of the Treasury shall deposit into the Coastal Defense Fund established under section 602, not later than sixty days after the end of the previous fiscal year, an amount equal to 10 per centum of the amount by which all sums deposited into the Treasury of the United States

pursuant to sections 7 and 9 of the Outer Continental Shelf Lands Act (43 U.S.C. 1338) during each fiscal year exceeded all sums deposited into the Treasury pursuant to sections 7 and 9 of that Act during fiscal year 1989.

STATEMENT OF
REBECCA HANMER
ACTING ASSISTANT ADMINISTRATOR FOR WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON FISH AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
COMMITTEE ON MERCHANT MARINE AND FISHERIES
U.S. HOUSE OF REPRESENTATIVES

JUNE 27, 1989

Good morning. I am Rebecca Hanmer, Acting Assistant Administrator for the Office of Water, U.S. EPA. It is my pleasure to appear before this Subcommittee again, Mr Chairman. Last September, I testified at the final hearing in a series of hearings this Subcommittee conducted on coastal pollution. I spoke about the challenges before us to protect and restore the environmental quality of our near coastal waters, living resources, and their habitats. It is evident in the legislation that you and your colleagues have introduced that our goals are the same: to provide national, state, and local governments with the authority and resources to meet the challenge. The environmental degradation occurring in the Nation's estuaries and coastal waters is unacceptable and we intend to do something about it.

The Coastal Defense Initiative would combat coastal pollution by targeting Federal and State programs and providing new tools to address pollution problems including mechanisms to generate new revenues and strengthen enforcement. EPA has not had time, as yet, to develop comments on all aspects of your legislative proposal or

the other coastal bills, therefore, we will not address specifics of the proposal at this time. However, we are prepared to discuss in a general way the principal issues. Primarily, we'd like to share with you what we've learned from our operating experience in the surface water protection programs and the National Estuary Program.

Just as the Subcommittee has been busy over the past ten months, so too have we been very busy. In addition to implementing new coastal and marine legislation passed by the last Congress, including the Ocean Dumping Ban Act of 1988, the Medical Waste Tracking Act, the Shore Protection Act, and the Plastic Pollution Research and Control Act of 1987, the Agency issued an internal interim National Coastal and Marine Policy this past January. Administrator Reilly has reviewed and endorsed this policy. The Policy establishes: goals and objectives to ensure recreational uses of our beaches and shoreline; strengthened pollution controls and protection of living resources; pollution prevention; land use and growth management; improved coastal science; and, international efforts. In order to accomplish the Policy's goals we are emphasizing building partnerships among Federal agencies, State and local governments, interest groups and the public. An Agency Standing Committee is being formed to oversee implementation of the policy.

Our new emphasis on coastal protection is currently being implemented through the Agency's coastal and marine programs such as the Chesapeake Bay and Great Lakes Programs, the National Estuary Program, the Regional/State Coastal Water Strategies and special initiatives, including the Gulf of Mexico Program and the Mid-Atlantic Bight Initiative, and the Ocean Dumping Program. These programs emphasize the importance of taking action now where specific problems are identified to achieve environmental results. We strive to build grassroots support at State and local levels by working closely with the public. This "bottom up" process of collaborative problem-solving builds the political and public will to support and pay for environment protection.

Let me now turn to discussing some specific programs and lessons that we are learning.

THE CHESAPEAKE BAY PROGRAM - WHAT WE'VE LEARNED

The broad surface water protection programs under the Clean Water Act have, as you know, focused funding and regulatory efforts on abating pollution from municipal, industrial, and other point sources. In looking at the problems of Chesapeake Bay, we've been able to see that this approach brought notable improvements in some areas, like the Potomac River quality, but left many more problems to be addressed. The 1987 Water Quality Act ensures continuation of the ongoing Federal-State partnership and continuity in Federal implementation grants to the States of Maryland, Virginia, and

Pennsylvania for the Chesapeake Bay. In addition, the Chesapeake Bay Agreement of 1987 established new initiatives, goals and deadlines to address the key issues of nutrient and toxic pollution, the decline of the Bay's living resources, and population growth and land use. A special panel convened by the Governors recently issued the "2020 Report" which makes recommendations on land use and growth management to the year 2020.

The control of agricultural nonpoint source pollution is the focus of a successful state-federal effort and the Agreement, in particular, has galvanized support for this effort. Four jurisdictions actually carry out nonpoint source control programs in the Bay watershed, while EPA's Chesapeake Bay Liaison Office provides administrative support and analytical services to knit their efforts together. Agricultural Best Management Practices have reduced phosphorous losses from cropland and animal waste by more than 23 million pounds within the Bay basin and nitrogen losses have been cut by about 11.5 million pounds from the same sources. Several USDA agencies, including the Soil Conservation Service, the Agricultural Stabilization and Conservation Service, and the Cooperative Extension Service have joined the states and local Conservation Districts and developed voluntary cost-sharing programs further reducing nutrient and sediment loads to the Bay from agricultural practices.

Another significant issue to be addressed was land development pressures on natural areas. The State of Maryland should be recognized as the first State to seriously address land use impacts on water quality and wildlife habitat. In 1984, the Maryland General Assembly passed the Chesapeake Bay Critical Area Law establishing a comprehensive Statewide program that includes flood plain management, sediment control, stormwater management, wetlands protection, and coastal zone management. Local jurisdictions are developing program plans and amending their zoning ordinances to reduce the impact of development. We are currently beginning to see local decision making as a result of the Critical Areas law. These decisions are precedent setting not only in Maryland's implementation of the law but as other states and localities adopt and implement similar statutes. For example, a marina request was recently denied based upon implementation of the law.

The Program demonstrates that support for managing coastal development can be generated; that comprehensive State-level land use restrictions, typically fraught with controversy, can be established; and that a process of local implementation complemented by State oversight can be defined. For Maryland, a State-level response worked; elsewhere a multi-county or multi-State program might be the effective approach to protect estuarine environments. We desperately need similar state and local government commitments to land use and growth management elsewhere across the country.

THE NATIONAL ESTUARY PROGRAM

The National Estuary Program, begun in 1985, is building Regional, State and local capability to address coastal problems. The program demonstrates strategies and innovative approaches to solving pollution problems that can be applied to other estuaries and coastal water bodies nation-wide. It is time for both the Federal government and the States to apply the lessons learned in the National Estuary Program to broader coastal problems.

Federal/State/Local Partnership

The Puget Sound Estuary Program is an outstanding example of strong State commitment and leadership that has resulted in action. The State of Washington adopted a comprehensive Puget Sound Water Quality Management Plan which contains specific commitments from Federal, State and local agencies to protect and enhance the Sound. Public education and involvement has supported efforts to strengthen point and nonpoint source pollution control, shellfish protection, contaminated sediment management, oil spill prevention, wetlands protection, and research and monitoring in the Sound. The Urban Bay Toxics Control Action Program has implemented source control action plans in three embayments and developed action plans for three others. The interagency "action teams" for Commencement Bay, Elliott Bay, and Everett Harbor have conducted more than 380 site inspections, assessed penalties, issued notices of violation and orders for corrective action, and issued a variety of new and

revised NPDES permits with more stringent effluent limits and monitoring requirements.

The Puget Sound Plan also identified twelve "early action" priority watersheds for the correction and prevention of nonpoint source pollution. In February 1988, the Authority issued regulations on local watershed management. As a result, each of the twelve counties are now preparing action plans for each watershed and developing a priority action list. The U.S. Department of Agriculture is cooperating with the State of Washington to provide technical assistance to local governments.

Citizen Stewardship

The National Estuary Program sponsors citizen stewardship through public education, participation, and involvement in the decision making process. Citizens advise each Management Conference on the selection of priority problems, public perception, and the importance of conveying scientific information to the public in "plain english." This level of participation is critical to building consensus and grassroots support.

Strong public advocacy has been an outcome of the Buzzard's Bay Project. The Coalition for Buzzards Bay promotes public awareness and public participation in the long term management of the Bay. The Coalition issues an "Environmental Report Card" which grades and ranks individual towns and communities on Buzzards

Bay on their performance on environmental issues. Progress on groundwater protection, surface and coastal water protection, growth management/planning is taken seriously. The first "Report Card" was published in newspapers in May of this year and received praise from citizens.

The participation of citizens and town officials has been vital in implementing solutions to the problems identified by the Management Conference. The Buzzards Bay Program is implementing an innovative demonstration project to control stormwater runoff by installing two different types of infiltration systems, allowing stormwater to be naturally treated by soils. Federal Agencies are the minor contributors in this project, EPA providing $148,055; the towns of Wareham and Bourne have provided $154,815; and, an individual contributor has donated 2 acres of land at $94,000. One infiltration system is complete and working.

The involvement of the Massachusetts Office of Coastal Zone Management in the Buzzards Bay Program serves as a model of effective cooperation between EPA and NOAA - linking Clean Water Act activities to the Coastal Zone Management Program. The Buzzards Bay Program State project office is housed at the Massachusetts CZM office. In this way, the Buzzards Bay Management conference can combine CZM's experience in land use issues with EPA's experience in water quality, providing a more expansive basin-wide program. The CZM office not only helps staff the

Buzzards Bay Program, it also brings experience in public outreach, grassroots networks, and an institutional framework which will help the program succeed with implementation of the Comprehensive Conservation and Management Plan.

COASTAL ZONE MANAGEMENT ACT/NATIONAL ESTUARY PROGRAM AGREEMENT

Last fall, EPA and NOAA signed an agreement to coordinate and integrate the NEP and CZMA programs. We have been working with NOAA to implement this agreement at the Federal, State, and local levels. Coordination of these two programs is critical for the restoration and protection of our estuaries and coastal waters, as the impacts of land use on water quality become increasingly more apparent. Also, we expect State and local CZM agencies to play a lead role, in cooperation with water quality and other natural resources and planning agencies in the implementation of the NEP Comprehensive Conservation and Management Plans. For example, North Carolina's CZM Agency is actively involved in the Albemarle-Pamlico Sounds NEP Management Conference. Since North Carolina's CZM Plan is implemented primarily at the local level, which includes regulation of growth and development, this will be important for carrying out the nonpoint source and habitat protection components of the management plan.

THE NEAR COASTAL WATERS PROGRAM

The Near Coastal Waters Strategy is EPA's next step beyond the National Estuary Program to address broader coastal issues and to

strengthen the use of our existing regulatory authorities. The strategy builds from lessons learned from the programs in the Great Lakes, Chesapeake Bay, and the National Estuary Program.

Implementation of the Near Coastal Waters Strategy has been underway in Agency over the past year. EPA, Region I, has developed a pilot Regional Near Coastal Water Strategy cooperatively with the States of Maine, Connecticut, Rhode Island, and Massachusetts. For example, the State of Maine already has a detailed plan to address toxic contamination in Casco Bay with targeted permitting for stormwater systems and bulk oil terminals, pretreatment audits, and spill prevention control and countermeasure inspections. Similar efforts are now underway in Region III, IX, and X. In 1990, our objectives will be to develop Regional Near Coastal Waters Strategies and Initiatives for all coastal Regions, including the Great Lakes.

EPA's Water Office will seek full integration of the Agency's water quality programs to address the coastal problems identified by the Regions and the States, and provide scientific, technical, and permitting assistance to them. All legal and regulatory authority and management tools will be put to work for effective solutions. Each strategy will develop action plans to be completed in five years, and will identify who will do what, when, and how.

In addition to fostering EPA/state/local partnerships, the Near Coastal Water Strategies are stimulating collaborative efforts between all federal agencies involved in coastal activities. For example, in support of the efforts of the Gulf of Mexico Program, a number of federal agencies have committed substantial program resources and staff time. The US Soil Conservation Service, NOAA and the US Army Corps of Engineers have assigned staff to work specifically with the Gulf of Mexico Program Office. Program activities and projects rely on the coordination of all federal, state and local agencies, as well as the public and affected user groups to ensure implementation of protective, restorative and sound management actions in the meeting the goals of the Gulf of Mexico Program.

OCEAN DUMPING PROGRAM/MARINE DEBRIS

The Federal government, the States of New York and New Jersey, and the municipalities are making real progress towards ending ocean dumping of sewage sludge by the end of 1991. Industrial waste dumping in the ocean ceased last fall and we will not permit any new dumping to occur.

However, the debris that litters our coastline will require a sustained Federal and State commitment to educate and inform the public. The problem is not illegal ocean dumping. The problem is a lifestyle that generates unnecessary wastes, and wastes that are not biodegradable. The growing nation-wide public involvement in

beach clean-up efforts is largely in response to the tide of garbage that washes up on our beaches as well as the litter that is left behind by thoughtless individuals.

Last year, EPA co-sponsored with NOAA the September beach cleanups and is co-sponsoring the 1989 cleanups that will be conducted under the guidance of the Center for Marine Conservation. Last year's cleanup involved 47 thousand people from 25 states and resulted in a collection of nearly 2 millions pounds of trash. Preliminary results indicate that plastics were, by far, the most common type of debris with paper, metal, and glass the next most common types.

Over the past year, Federal and State officials have spent a lot of time and money trying to pinpoint where floatable trash originates. We have conducted a number of surveys and are beginning to close in on the major sources of the problem such as combined sewer overflows and vessels. We are working closely with other Federal agencies and with State and local agencies and public interest groups to initiate programs aimed at specific sources of debris such as combined sewer overflows and litter. These cooperative efforts are most evident in EPA Region II, along the coasts of New York, and New Jersey where beach closures plagued the last two summer seasons. In addition to Federal agency activities, the States of New Jersey, New York, Connecticut, and Rhode Island all will have medical waste tracking systems in place

this summer. Also, shore communities in both New Jersey and New York have beefed up street sweeping efforts to help keep trash out of the stormsewers.

STATE AND LOCAL INITIATIVES/ON THEIR OWN

State and local governments are already taking the initiative, to address water quality problems. The Federal government has the responsibility to provide technical assistance as well as to provide for the transfer and sharing of innovative funding, technological, and management tools that will enable local and State agencies to do their job well. For example, the Apalachicola River Basin may be the most protected estuarine system in the United States. For over ten years the State of Florida, in conjunction with Federal and local authorities, has taken a variety of actions to preserve this pristine drainage basin. The protection has been accomplished by three types of actions: 1.) land acquisition, 2.) protective designations, and 3.) comprehensive basinwide management. Extensive research to document the ecology of the Apalachicola Bay system helped gain public support and focus State efforts. The State has purchased over 85,000 acres; 40% of the floodplain is publicly owned and this publicly owned land includes nearly 90% of the wetlands in the floodplain. Efforts to acquire more land in the basin continue; the goal is to have the floodplain of the river intact and in public ownership.

Another "success story" that demonstrates local initiative is the cleanup of a storm water drain that was contributing 12% of the lead entering into the central Puget Sound Basin. Sediment sampling indicated that the Lander Street storm drain in the City of Seattle was contributing high quantities of lead to the Duwamish River, a large river which feeds Puget Sound. In 1985, the City of Seattle and Seattle's sewage and water utility funded a cleanup of the storm drain. During cleanup operations, approximately 20 cubic yards of contaminated sediment were removed. Because the lead concentration in the sediment was so high, 30 percent, the sediment was sent to a smelter for metals reclamation. Current water column monitoring indicates that the storm drain cleanup reduced lead concentrations in the Duwamish River by approximately 99%.

An effective Pretreatment Program requires aggressive local commitment to make it work. EPA develops national standards for categories of industries and prohibits discharges of certain waste from all industrial sources to municipal sewage treatment systems. However, local authorities have the responsibility to set more stringent limits and take enforcement action where necessary. Where actions have been taken, the POTWs are often capable of now producing sludge of high enough quality to be of beneficial use. Milwaukee and Philadelphia have long marketed their sludge as a fertilizer, milorganite. Thanks to pretreatment, Seattle now has sludge that is clean enough to be marketed as well. And, East

Providence, Rhode Island, has reduced the loads of nickel and copper to Narragansett Bay by 86% and 88% respectively.

What we have learned from this example is that we must provide flexibility and focus in designing coastal programs so that the most serious problems are addressed in a priority sequence. While there are national problems, like combined sewer overflows, that must be faced, we also need a flexible design that allows distinctions to be made in timing and regulating approaches based on the relative water quality and use impact of a given source.

IMPLEMENTATION/RESOURCE NEEDS

Cleaning up our near coastal waters and protecting our coastal resources will not be an easy task nor will it be inexpensive. The relative roles and funding responsibilities of Federal, State, and local governments as well as private industry must be assessed carefully. The States and some municipalities in particular are facing major new responsibilities and resource needs. For example, responsibility for funding municipal wastewater treatment systems has shifted away from federal grant programs to State and local funding. The Federal construction grants program is being phased out and replaced by new State Revolving Fund programs.

The change from grant to loan funding will provide a long term approach to meeting wastewater construction needs. However, a byproduct of this change, will require States to identify

additional funding resources for their overall water quality programs. We are just finishing a State Funding Study that has quantified the State resource problem and analyzed possible solutions, such as revenue from fees, fines, and penalties, and other sources. Your legislation proposes several mechanisms such as targeted penalties, a tap into the offshore oil pollution compensation fund, and imposition of a coastal discharge fee that might address this problem.

Alternative funding proposals such as fees have many positive fiscal and behavioral impacts. For example, a Federal and State fee system may present a new source of long term, stable funding as well as promote pollution prevention by encouraging use of treatment controls. However, the proposal raises several complex issues that need to be carefully evaluated. For instance, how should the fee revenues be treated in States with delegated vs nondelegated NPDES programs? What are the equity issues of charging higher NPDES fees in coastal areas vs noncoastal areas? How do we integrate new fees targeted to coastal programs with existing fee structures? Should we target fee revenues to coastal areas when the entire State Water Programs are facing a funding gap and looking to raise fees to fund that statewide gap? Also, if not properly set up, a discharge fee system may set up a "pay to pollute" situation.

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Nonpoint sources present equal, if not greater, pollution concerns with point sources. Between 1971 and 1985 there was an net upgrade of 50 thousand acres of shellfish beds in the Northeast and the Mid-Atlantic because of improved point source controls. However, there was a net downgrade of almost twice that acreage due to coastal development and urban runoff. Should we also consider raising revenues from nonpoint sources, such as putting a surcharge on pesticide or fertilizer products?

THE FEDERAL ROLE

At this point, however, I will comment on the federal role, particularly EPA's responsibilities, to address coastal pollution problems. We are concerned that some of the draft legislation proposes changes that are not needed, and may even be wrong. For example, the Clean Water Act correctly places responsibility for water quality on the States. States have determined, and established, through water quality management plans, what uses - drinking water supply, recreational use, shellfish growing waters, industrial use - are appropriate, and should be maintained or recovered. The "designated uses" are protected by numerical and narrative water quality criteria and standards that are also adopted by the States. The States have been required to identify waters to EPA not meeting these designated uses. In cases where the designated use is not being met, the State is required to develop total maximum daily loads for individual pollutants. These daily loadings provide the basis for future limitations in permits

issued by the states or EPA that will ensure attainment of water quality standards.

National lists of degraded or threatened waters developed by the Federal government we believe will have little effect on the State's willingness or ability to do anything about the problem. Our successes have come where the State, with scientific and technical assistance from EPA, has recognized a problem and understood what to do about it. EPA's role should continue to be in the development of scientific and technical information, providing the States with the tools they need to get the job done. In many cases, particularly where federal funds have fallen short, or where we have moved too slowly, the States have made things happen on their own. This is particularly true for contaminated sediments and toxic hot spots as well as the issuance of more stringent criteria for certain pollutants that may be of critical concern in a given waterbody, but not a national priority. It is also the case where the States have recognized and tried to address declines in living resources that warranted immediate and aggressive action. For example, as part of the Chesapeake Bay Program, the States of Virginia and Maryland are now evaluating carefully developed living resource and habitat criteria for incorporation into State water quality management plans.

CONCLUSION

In sum, Mr Chairman, our goals are the same: to preserve and promote the environmental quality of our near coastal waters and habitats. We will continue to evaluate the specific proposals in your legislation. We look forward to working with you and your staff.

This concludes my statement. Thank you for the opportunity to appear before you today. I would be pleased to answer any questions that the Subcommittee may have.

STATEMENT OF

B. KENT BURTON
ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

BEFORE THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
AND THE
SUBCOMMITTEE ON OCEANOGRAPHY
COMMITTEE ON MERCHANT MARINE AND FISHERIES
U.S. HOUSE OF REPRESENTATIVES
JUNE 27, 1989

Mr. Chairman and Members of the Subcommittees:

I am B. Kent Burton, Assistant Secretary of Commerce for Oceans and Atmosphere. I'm pleased to be here today to describe activities of the National Oceanic and Atmospheric Administration (NOAA) related to assessing long-term trends in coastal pollution and to discuss ways in which government at all levels can be strengthened to meet the challenge of improving coastal environmental quality. The Administration is currently reviewing H.R. 2647, the "Coastal Defense Initiative of 1989", and has not yet taken a position on the bill. I, therefore, will not discuss the specifics of the bill at this time. With me today are NOAA's Charles N. Ehler, Director of the Office of Oceanography and Marine Assessment, and Don Scavia, Office of Chief Scientist, the organizations responsible for most of the Agency's coastal pollution monitoring and assessment activities.

Since the end of March, the EXXON VALDEZ oil spill and the three spills this past weekend have illustrated dramatically the immediate effects of pollution on sensitive coastal areas and their resources. In addition, medical wastes on east coast beaches last summer illustrated the immediate effects of pollution incidents on valuable coastal environments, marine recreation and tourism, and local and regional economies. As dramatic as these events have been in the eyes of the American public, however, at least as important is the less visible, systemic deterioration of the quality of our coastal environment from chronic discharges of pollution into coastal areas, and the loss of important coastal habitats. Toxic pollutants from point and nonpoint sources, nutrients from wastewater treatment plants and agricultural sources, as well as the continuing destruction of coastal wetlands due to human activities, pose long-term threats to coastal resources.

Trends in Coastal Population

By the year 2000, it is projected that coastal areas in the U.S. will be the home of over 100 million people, about 38 percent of the Nation's population. This is significant because coastal areas of the contiguous U.S. account for only about 10 percent of the total land area. Coastal populations are large consumers of housing (and seasonal housing), water, and energy. They are also, as a consequence, major producers of solid waste and wastewater.

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Coastal areas are centers of industry and commerce and, as a result, often the final resting places for the wastes generated in industrial production processes. In 1989, for example, coastal areas accounted for 28 percent of all U.S. hazardous waste sites, including 35 percent of the National Priorities List sites -- those having the highest priority for cleanup. Coastal areas will continue to be major population and economic centers into the next century, and they require effective management to ensure that environmental quality is not stressed further.

Trends in Pollutant Discharges

Pollutant discharges to coastal areas are significant and will increase as population and industry continue to concentrate along the coast. While only about ten percent of the Nation's 66,000 point sources are located in coastal areas, they contribute over one-third of the total annual wastewater discharged throughout the country. Over one-fourth of the 2,900 major wastewater treatment plants (greater than one million gallons per day) in the U.S. are located in coastal counties, reflecting the concentration of population in these areas. Yearly sludge production associated with these plants is currently estimated at 3.4 million dry tons and is projected to increase 80 percent by the year 2000. As space for landfills in coastal areas becomes more scarce and environmental regulations more stringent, finding acceptable disposal methods for sludge will be increasingly difficult.

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Trends in Toxic Pollution in Coastal Areas

For each of the past five years NOAA's National Status and Trends (NS&T) Program has been monitoring systematically estuarine and coastal sites to determine the concentration of toxic pollutants in mussels and oysters, bottom-feeding fish, such as flounders, and sediments. Since 1984 we have measured the concentration of synthetic organic compounds and heavy metals in fish and sediments at about 50 sites. Each year we have made some changes in the sampling locations. Since 1986 we have measured the concentration of these same pollutants in mussels, oysters, and associated sediments at an additional 150 sites.

The National Status and Trends Program is the only national program that is using uniform methods to collect and analyze toxic pollutant concentrations in selected coastal fish, shellfish, and sediments to produce a consistent, high quality data base with which to compare these concentrations across sites and to analyze trends over time. We have placed special emphasis on quality assurance and quality control so that the scientific validity of these comparisons can be objectively judged. We are working with both the National Institute of Standards and Technology and the National Research Council of Canada on continuing performance evaluations to ensure consistency within our participating laboratories and comparability among laboratories. The pollutants that are monitored include: DDT and its metabolites; nine other

chlorinated pesticides, including aldrin, ieldrin, and mirex; polychlorinated biphenyls (PCBs); 18 polycyclic aromatic hydrocarbcns (PAHs); and 16 elements.

Sampling sites have been selected to be "representative" of general conditions within the areas in which they are located. Generally, sampling sites avoid point sources of contamination, such as outfalls from industrial or sewage treatment plants, because such "hot spots" are not considered to be representative of conditions within the larger water body.

Based on NOAA's NS&T Program, the high concentrations in bivalves (mussels and oysters) for the most pollutants were found in the Hudson/Raritan Estuary, Boston Harbor, Western Long Island Sound, Baltimore Harbor, San Francisco Bay, Delaware Bay, and San Diego Bay. The high concentrations of total PCBs in bivalves was found in Buzzards Bay, Massachusetts; total pesticides, both DDT and non-DDT, the Hudson/Raritan Estuary; total PAHs, Elliot Bay (within Puget Sound); for lead, Marina Del Rey; and for mercury, Tampa Bay.

The high concentrations of most pollutants analyzed from the livers of eight species of bottom-feeding fish (e.g., flounders, spot, and croakers) for the most pollutants were found at Southern California sites (e.g., Dana Point, San Diego Harbor, eal Beach, and Santa Monica Bay), Western Long Island Sound, San Francisco Bay, and Elliot Bay. High concentrations of total PCBs in fish livers was found in San Diego Bay; total pesticides,

Boston Harbor; DDTs, San Pedro Canyon; lead, Casco Bay; and for mercury, San Francisco Bay.

Samples of sediments from NS&T sites have also indicated that the most contaminated locations sampled were in Boston Harbor, the Hudson/Raritan estuary, and sites around San Diego, Los Angeles, and Seattle. For the most part, NS&T sites in the Gulf of Mexico and the Southeastern United States had lower levels of contamination than sites sampled elsewhere in the country. However, near some Florida cities, including Jacksonville, Tampa, Panama City, and Fort Walton Beach, also had high concentration for some pollutants.

These data reveal the truly national extent of the problem of toxic contamination of sediment, fish, and shellfish throughout the coastal waters of the United States. There is some good news, however. Based on a NOAA analysis of historical monitoring data from 13 national programs, decreasing concentrations of DDT contamination of fish and shellfish are evident in most NS&T sites nationwide. Decreasing contamination of PCBs, dieldrin, and toxaphene in selected species at specific sites are also evident.

The National Status and Trends Program has analyzed the latest three years of NOAA data to look for trends in concentrations of pollutants in mussels at about 150 sites throughout the United States. Our objective is to monitor changes in pollutant levels associated with human activities and

to assess the effectiveness of control strategies. Since our data are spatially and temperally limited, our analyses must be viewed as very preliminary and must be interpreted with caution. However, these data are among the first systematic signals of trends in national coastal environmental quality and will be more reliable as indicators as additional years of data are added.

Our preliminary results present a mixed picture of trends in coastal environmental quality, and indirectly reflect mixed results in our effectiveness in reducing levels of pollutants in coastal and estuarine environments through management actions. In general, classes of chlorinated organic compounds show a tendency to decrease rather than increase. This finding is consistent with the fact that uses of most of these compounds have been banned or severely restricted. Generally, levels of polychlorinated biphenyls, DDT, chlordane, and dieldrin, tend to be decreasing. Concentrations of high and low molecular weight PAHs varied between increases and decreases in our sampling. However, levels of the metals, mercury, selenium, and lead appear to be increasing nationally, but cadmium levels tend to be decreasing.

Within individual coastal systems the picture is more complex. For example,in the Hudson-Raritan estuary and other New York Bight sites, levels of chlordane and dieldrin are decreasing, but levels of chromium, copper, mercury, and nickel are increasing. In Mississippi Sound and in Marina Del Rey near

Los Angeles, levels of DDT in mussels, despite a ban on its use since 1973, are actually increasing. In Long Island Sound, the Delaware Bay, and Charleston Harbor, levels of cadmium are decreasing. The full report documenting these analyses will be printed by NOAA soon, and a copy will be provided to your Subcommittees.

Nutrient Discharges to Coastal Areas

Estuaries are positioned at the downstream end of coastal watersheds and receive water, sediments, and other materials from large land drainage basins. These materials include the continuous addition of nutrients from both natural and human sources. Some estuaries can assimilate large quantities of nutrients. However, excessive amounts of some materials can be highly detrimental to the estuaries and their uses. Increasing evidence of reduced fish catches, loss of habitats, and degradation in water and sediment quality caused by nutrient over-enrichment indicates that nutrient discharges must be limited. Estimates based on NOAA's National Coastal Pollutant Discharge Inventory, indicate that nearly 300 thousand tons of phosphorus and 1.8 million tons nitrogen are discharged annually into the Nation's estuaries. Twelve percent of the nitrogen and nearly 40 percent of the phosphorus are attributed directly to wastewater treatment plants. The Northeast region of the U.S., with its large population, contributes the most nitrogen and phosphorus from wastewater treatment plants while the Gulf of

Mexico, with large land areas devoted to crops, contributes the most from agricultural sources. Large fractions of both nitrogen and phosphorus discharges came from sources upstream of the primary estuarine drainage area.

Working closely with the Environmental Protection Agency's Office of Water, NOAA has begun a nation-wide study to evaluate the status and susceptibility of the Nation's estuaries to excessive discharges of nutrients. From a preliminary assessment of almost 100 estuaries in NOAA's National Estuarine Inventory, we concluded that 41 are likely to retain nutrients for extended periods based on their flushing and dilution characteristics. Based on NOAA nutrient loading estimates, 29 are expected to exhibit medium to high concentrations of nutrients. Their sensitivity of estuarine biota, coupled with high nutrient loads, would make them good candidates for more detailed analyses and possible additional management actions to reduce levels of nutrient discharges within these estuaries.

Trends in Shellfish-Growing Waters

Based upon an examination of the quality of shellfish growing waters in over 100 estuaries, NOAA has determined that, in 1985, over nine million acres, 65% of the total waters suitable for shellfish growing, were approved for harvest. Twenty-one percent of waters not meeting approved standards were prohibited from use, 13 per cent were conditionally approved, and fewer than one percent were restricted.

Two thirds of this approved area is found in the three largest East Coast estuaries: Chesapeake Bay (2.4 million acres approved), Pamlico Sound (1.3 million acres), and Long Island Sound (0.7 million acres). In these estuaries, almost 50% of classified acreage is not productive because of extreme salinities, or lack of suitable depth, substrate, or habitat for molluscan shellfish.

Most changes in classification (1971 -1985) are attributable to changes in administration of state shellfish programs based on a number of pollution sources. Northeast waters that do not meet approved National Shellfish Sanitation Program (NSSP) requirements are affected mainly by sewage treatment plants, combined sewage and urban runoff. In the Mid-Atlantic, boating activities have major impacts, in the Southeast, animal runoff if the major factor. Upstream sources affect over half of the harvest limited and most productive waters in the Gulf. West coast waters are affected by nonpoint runoff, particularly from animal sources.

A recently released series of NOAA reports detail the status of shell fishing waters of the U.S. Since shellfishing waters are classified for the commercial harvest of oysters, clams, and mussels based upon public health concerns, we have assessed the impacts of this system and raised questions about the use of fecal coliform as the indicator of choice in the NSSP. Efforts

are underway by Federal scientists, the private sector, and regulators to establish the relationships between pollution source, indicators, and shellfish-borne disease.

The current trend is one of changes in primary harvest centers. Over the past 15 years, the East Coast industry has experienced a severe decline in shellfish available for harvest. This decline is a result of past overharvesting, shellfish mortality from shellfish disease and predation, and increased closures due to pollution.

In the oyster grounds of the Mid-Atlantic, the diseases, MSX and dermo, have devastated the resource. Harvest of oysters has shifted to the Gulf Coast. A decline in freshwater inflow is affecting the Gulf production, forcing the industry to increase culture and relay activities. In Maine, North Carolina and South Carolina, closures due to paralytic or neurotoxic shellfish poisoning caused additional closures beyond those experienced due to pollution. Clam harvests have shifted from coastal New York to the Indian river of Florida due partially to new Florida programs that allow for relay and depuration.

Trends in Coastal Wetlands

Coastal wetlands are one of our Nation's most important natural resources. They provide critical habitat for fish, shellfish and wildlife, filter and process agricultural and industrial wastes, and buffer coastal areas against storm and wave damage. They also generate large revenues from a wide

variety of recreational activities such as fishing and hunting. Unfortunately, coastal wetlands continue to disappear in many areas at an alarming rate.

For example, in coastal Louisiana, the rate of loss of coastal wetlands has accelerated from about 5 square miles per year early in the century to approximately 50 square miles per year between 1956 and 1978. Recent studies suggest the rate of loss has slowed somewhat during the 1980s, but the rate still is approximately 40 square miles per year or about one percent of remaining wetlands per year. Losses such as these can have far-reaching effects. Based on long established relationships and studies demonstrating the dependency of coastal fish and shellfish on estuarine wetlands, NOAA has estimated that the loss of wetlands in the United States has resulted in losses of millions of dollars in fisheries products. Natural coastal and deltate processes coupled with human activities have accounted for the rapid loss of Louisiana's coastal wetlands. The long-term forces of subsidence, sea-level rise, saltwater intrusion, and erosion have been responsible for the natural loss of wetlands. Flood protection in the flood-prone lower Mississippi Valley and private-sector development have also caused wetlands loss. Furthermore, rising costs of and demand for waterfront property will cause increased competition in coastal areas for limited space. In the southeast region (North Carolina to Texas) alone, from January 1981 to December 1985, the U.S. Army Corps of Engineers received over 27,000 proposals to alter wetlands.

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NOAA's Role in Predicting And Preventing Coastal Pollution

Over the next 10 years, Federal and State governments will make decisions about the use of the coastal waters that will determine whether this economically and environmentally important area will continue to be a valuable national resource. NOAA plays a vital Federal role in developing and implementing solutions to many of the problems confronting the Nation's coastal waters. That role includes legislatively mandated responsibilities for living marine resources, as well as providing predictions, advice, and the sound scientific basis for environmental decisions made by other local, State, and Federal agencies. Simply stated, NOAA's role is to provide information to make effective environmental decisions possible. Increasing the capabilities of Federal and State decisionmakers to assess and predict emerging problems -- to address tomorrow's problems today -- is a goal of the National Oceanic and Atmospheric Administration's Coastal Ocean Program.

This focus on developing information for the Nation's coastal ocean decisionmaking is enhancing the nature of the traditional role of NOAA. It requires fundamental changes in the types of products developed; services provided; data collection, research, and assessment activities undertaken; and the timing and manner in which these products, information, and services are developed and delivered.

This changing environment is represented in the initiation of NOAA's Coastal Ocean Program. The Coastal Ocean Program began in 1988 with management initiatives toward revitalizing and refocussing its activities in support of three program goals:

1. Prediction of coastal ocean degradation and pollution
2. Conservation and management of living marine resources
3. Protection of life and property in coastal areas

The Administration's FY 1990 budget request, presently under review by the Congress, in addition to fully funding the National Status and Trends Program, focusses on activities within NOAA's Program goal for prediction of coastal ocean degradation and pollution. Our efforts are designed to improve NOAA's ability to monitor, assess, and predict coastal environmental change caused by pollution and other man-made and natural events. The products of these endeavors form important elements of coastal management strategies.

Strengthening Coastal Management

Clearly the Nation needs effective programs at all levels of government to manage the quality of its coastal resources. On several occasions the President has expressed his concerns about the health of our bays, estuaries, and wetlands throughout the country. Attacking the problems of coastal pollution will require a long-term, coordinated Federal-State approach, in concept similar to efforts underway to improve the Nation's air quality. Wetlands protection and water quality management in

estuaries are important elements in coastal management programs of many States.

The Coastal Zone Management Program was established to create a comprehensive management umbrella for the beneficial use, protection, and development of the resources of the our coastal areas. Over the past year, NOAA's coastal management program has worked closely with the Environmental Protection Agency's Office of Water to coordinate the efforts of State coastal management programs toward improving water quality with efforts to strengthen State and local management actions within individual estuaries included in EPA's National Estuary Program. For example, to the extent permitted by law, States will be required to submit Comprehensive Conservation and Management Plans developed under EPA's National Estuary Program for incorporation into approved Coastal Zone Management Programs after approval by the Governor(s) and the EPA Administrator. NOAA is also providing scientific support and technical assistance to EPA for the development of national guidance on the management of water quality programs to address more effectively the health of living marine and estuarine resources.

NOAA looks forward to continuing to work closely with other Federal and State agencies on strengthening our collective efforts to improve the quality of our coastal environments.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions you might have.

Testimony
by

William M. Eichbaum

on
HR 2647---The Coastal Defense Initiative of 1989

before
The House of Representatives
Subcommitte on Fisheries and Wildlife Conservation
and The Environment

June 27, 1989

Mr. Chairman, my name is William M. Eichbaum, and I welcome the opportunity to testify before the Commitee on HR 2647, the Coastal Defense Initiative of 1989. The events of this first weekend of the summer of 1989 make it all too clear that our coasts are under severe attack by the economic and development pressures of mankind. You are to be commended for offering this very important piece of legislation.

For the past decade I have worked with the environmental protection programs of the states of Maryland and Massachusetts--- states with vital interests in their coastal resources. In this work I have been involved with efforts to direct the energies of both the water quality agencies and the coastal zone management programs to better address the decline of coastal water quality. HR 2647 directly confronts this issue. For the past two years I have also served on a Committee of the National Research Council which is assessing the state of the nation's marine monitoring program. HR 2647 also makes major contributions to this important issue.

Our nation's, and indeed the world's, coastal waters are under assault. This fragile marine environment is a vital component of the ecological structure upon which human well-being is dependent. Fisheries provide substantial food resources. Biological productivity of estuaries, bays and near shore waters exceeds that of tropical forests. Gaseous exchange with the atmosphere by marine organisms is critical to maintaining healthy air. General economic activiy at the water's

edge, much of it dependent on clean water, surpasses that of any other geographical location. Recreational and aesthetic opportunities attract growing numbers of people to the coast every year. Perhaps as much as seventy percent of this nation's population will live within the coastal zone in the next five years. There is no region where the clash between environmental resources and economic activity provides a greater challenge to the concept of sustainable development.

The Congress has not neglected this issue. The enactment of the Coastal Zone Management Act in 1972 was an important step. Most recently, enactment in 1986 of section 320 of the Clean Water Act addressing the nation's bays and estuaries was an important contribution. Yet, more needs to be done. HR 2647 moves in the right direction.

Based on my experience with state management agencies and the NRC, I would like to comment in some detail on three issues which HR 2647 addresses. They are: growth management and the role of the Coastal Zone Management program; monitoring; and enforcement.

Growth Management

Simply stated, human development of the coastline with the associated discharge of pollutants and alteration of habitats is the major reason for the decline in quality of our coastal waters. Reorienting coastal zone management programs to focus on the impacts of land-use decisions on water quality is an

essential task. It is also a task which can be achieved. In Maryland we enacted a Chesapeake Bay Critical Area Commission in 1984 to protect the vital lands surrounding the Bay and its tidal tributaries. This initiative was based on the coastal zone managment program and built upon the cooperative relationships which had been established between the state and local governments. However, it pushed beyond those relationships in order to assure that the state's interests in protecting water quality and important wildlife habitat would be achieved.

Based on my experience in Maryland, I would make two points about the proposed legislation.

First, Title III suggests that the problem of land use activities need only be addressed in those areas which are pristine or severely degraded. This is an unneccessarily narrow proposal. In Maryland, we found that it was the subtle development pressures on rural land which posed the greatest threat to the future of the Bay. The creeping suburbanization of coastal lands must be controlled if the polluting effects of routine development are to be eliminated. Therefore the planning process required in this Title should address all lands adjacent to coastal waters.

Second, Section 303 proposes that EPA assure that the inland boundaries of coastal zones be carefully reviewed. This is extremely important. Activities immediately adjacent to the marine coast are not the only source of adverse impacts. Land development activities occurring far inland along rivers

discharging to the coast can also be important. Again, in the Chesapeake Bay we are keenly aware of the problems which exist because of flows from Pennsylvania via the Susquehanna River. No state can address the land use patterns in another. However, a federal system can begin to assure that those who are upstream manage the development of their land so that it does not destroy valuable resources downstream. Section 320 of the Clean Water Act establishes an important precedent for the exercise of this authority.

Monitoring

Title IV of HR 2647 proposes a National Coastal Monitoring Program. The time for such a system is long overdue. There is now no system for describing the condition of our coastal resources, the trend in that condition or the reasons for its condition. This failure exists in spite of the fact that the nation spends over $100 million in monitoring the coastal sea. The recommendations of the proposed legislation go far to correct this situation.

One of the serious problems in this regard is the nature of cooperation between NOAA and EPA. Both agencies have important responsibilities in monitoring the marine environment. Unfortunately, there is not an adeguate level of cooperation or coordination between them. The creation of a federal Task Force to develop the national monitoring program may achieve substantial improvement in this situation.

The proposed legislation creates a system of regional monitoring. This is appropriate. However, it is likely that only a limited number of regions will need to be the subject of intensive monitoring. As a companion effort there ought to be a system of monitoring, which is less intense, and "fills in" between those areas which are intensely monitored. The combination of these intense and less intense areas of monitoring will provide the overall picture of the marine environment's condition.

Finally, it is important to note that a newly designed national system of marine monitoring would not be any more expensive than are the current activities. However, a significant shift of resources from compliance monitoring to environmental monitoring would be required. This will necessitate some fexibility by EPA in drafting permit requirements.

Enforcement

All too often our society has responded to environmental problems with the enactement of new statutes without adequate attention to the enforcement of the law. The Coastal Defense Initiative of 1989 recognizes that improvement in enforcement is essential to the protection of our marine waters. Two initiatives are worth noting: the bar to federal assistance and contracting for pollutors; and the role of environmental auditors. Both are important provisions to include in federal

statutes. However, there are problems.

The use of qualifying language such as "significant", and "substantial", provides a huge loophole pursuant to which the goals of the statute can be avoided either by regulators or by dischargers who challenge agency determinations.

Undoubtedly the role of environmental auditors will grow in importance in the overall management of our nation's environmental resources. Acknowledging this function is an important contribution of the legislation. However, there needs to be greater clarity as to the consequences for a discharger who is in non-compliance. Perhaps Section 505 (c) should clearly state that permits will not be renewed. Also, a mere "moment in time" of compliance should not be adequate to avoid the reach of the statute.

Conclusion

I have discussed only a few of the issues which are addressed by the Coastal Defense Initiative of 1989. There are other important matters such as relations between EPA and NOAA, the use of water quality standards, funding, and the relationships to existing statutory requirements. Undoubtedly these will receive substantial attention during the debate on this legislation. However, it is absolutely clear that the marine waters of this nation are severely threatened. This legislation if enacted would contribute to the reduction of that threat.

SUMMARY OF STATEMENTS PRESENTED TO THE

COMMITTEE ON

MERCHANT MARINE AND FISHERIES

CONCERNING

HR2647 THE COASTAL DEFENSE INITIATIVE OF 1989

BY

ROBERT PERCIASEPE

DEPUTY SECRETARY

MARYLAND DEPARTMENT OF THE

ENVIRONMENT

Mr. Chairman and members of the Committee, thank you for the opportunity to speak today on the Chesapeake Bay Program and HR 2647. My name is Robert Perciasepe, Deputy Secretary, Maryland Department of the Environment. I am also Chairman of the Chesapeake Bay Monitoring Committee and represent Maryland on the Chesapeake Bay Implementation Committee.

Environmental issues and concern are increasingly at the top of the public agenda and I want to commend the subcommittee and Congressman Studds on the leadership being provided in Congress on Ocean and Marine Issues. My comments today are general and I will appreciate the opportunity to bring more detailed comments a little further down the road.

BACKGROUND ON THE CHESAPEAKE BAY PROGRAM

PARTICIPANTS: Maryland, Virginia, Pennsylvania, District of Columbia, Federal Government, Chesapeake Bay Commission

STRUCTURE:
- Executive Committee
- Principal's Staff Committee
- Implementation Committee
- Various Advisory Groups
- Subcommittees

1987 AGREEMENT
- Water Quality
- Living Resources
- Population, Growth and Development
- Public Access/Public Education
- Governance

STRONG POINTS:
- Tremendous Partnership
- Federal Support
- Technical Sophistication
- Public Involvement
- Direct Involvement of the Principals

TRANSFERABLE POINTS:

- Strong Governor Involvement
- Comprehensive Approach
- Strong Interstate Agreement Including "Non-Coastal" areas where appropriate
- Strong Interstate monitoring/data
- Flexible institutional arrangements
- Federal "inventives"
- Emerging emphasis on land use impacts and analysis

SOME PRELIMINARY VIEWS ON HR 2647

GENERAL:

This bill is in the right direction. In my opinion many of the good points of the Bay Program are found in it. In particular:

- Land-Use Planning
- Monitoring
- Technical Assistance
- Financial Support and Incentives

WATER QUALITY:

- The goal of national consistency is a plus.
- The role of states must be strong and recognition for local variability will be needed.

COASTAL MANAGEMENT:

- The need to address population and land use development is a must. This is an important part of the bill.
- States will need some flexibility in designating lead agencies.

MONITORING:

- An absolute must to be able to manage the water quality planning and assessments that must take place.
- I recommend a more detailed presentation on the Chesapeake monitoring program in the future hearing schedule.

FUNDING:

- An important component in the "incentive" part of the equation.
- States will need time to work on this part of the bill.
- Funding eligibility should include "nutrient" control where needed.
- An absolute necessity to make the program work and to boost coastal protection nationwide.

This concludes my brief summary and I would be happy to answer any questions the committee may have.

Thank you again.